



(2)

**US Army Corps
of Engineers**Construction Engineering
Research Laboratory

Maintenance Task Data Base for Buildings: Heating, Ventilating, and Air Conditioning (HVAC) Systems

by

Edgar S. Neely
Robert D. Neathammer
James R. Stirn
Robert P. Winkler

This research project has provided improved maintenance resource data for use during facility planning, design, and maintenance activities. Data bases and computer systems have been developed to assist planners in preparing DD Form 1391 documentation, designers in life-cycle cost component selection, and maintainers in resource planning. The data bases and computer systems are being used by U.S. Army Corps of Engineers (USACE) designers at the District and installation levels and by resource programmers at USACE Headquarters, and Army Major Commands and installations. These research products may also be useful to other Government agencies and the private sector.

This report describes the building task maintenance and repair data base development and gives examples of its application. It is one of a series of special reports on the maintenance and repair data base. While this report describes HVAC systems, other reports in the series cover architectural, plumbing, and electrical systems.

91-09282

91 0 49 016

The contents of this report are not to be used for advertising, publication, or promotional purposes. Citation of trade names does not constitute an official indorsement or approval of the use of such commercial products. The findings of this report are not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

DESTROY THIS REPORT WHEN IT IS NO LONGER NEEDED

DO NOT RETURN IT TO THE ORIGINATOR

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave Blank)	2. REPORT DATE May 1991	3. REPORT TYPE AND DATES COVERED Final		
4. TITLE AND SUBTITLE Maintenance Task Data Base for Buildings: Heating, Ventilating, and Air-Conditioning (HVAC) Systems			5. FUNDING NUMBERS RDTE dated 1980 REIMB 1984-1989	
6. AUTHOR(S) Edgar S. Neely, Robert D. Neathammer, James R. Stim, and Robert P. Winkler				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Army Construction Engineering Research Laboratory (USACERL) P. O. Box 9005 Champaign, IL 61826-9005			8. PERFORMING ORGANIZATION REPORT NUMBER SR P-91/21	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) HQUSACE ATTN: CEMP-EC 20 Massachusetts Avenue, NW Washington DC 20001 Office of the Chief of Engineers ATTN: DAEN-ZCF-R Pentagon Washington DC 20310			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES Copies are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161				
12a. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) This research project has provided improved maintenance resource data for use during facility planning, design, and maintenance activities. Data bases and computer systems have been developed to assist planners in preparing DD Form 1391 documentation, designers in life-cycle cost component selection, and maintainers in resource planning. The data bases and computer systems are being used by U.S. Army Corps of Engineers (USACE) designers at the District and installation levels and by resource programmers at USACE Headquarters, and Army Major Commands and installations. These research products may also be useful to other Government agencies and the private sector. This report describes the building task maintenance and repair data base development and gives examples of its application. It is one of a series of special reports on the maintenance and repair data base. While this report describes HVAC systems, other reports in the series cover architectural, plumbing, and electrical systems.				
14. SUBJECT TERMS data bases facilities maintenance life-cycle costs cost analysis			15. NUMBER OF PAGES 376	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT SAR	

FOREWORD

This research was conducted for the Directorate of Military Programs, Headquarters, U.S. Army Corps of Engineers (HQUSACE) and the Office of the Assistant Chief of Engineers under various research, development, testing, and evaluation (RDTE) and reimbursable funding documents. Work began under RDTE in 1980 and continued in reimbursable projects during 1984 through 1989. The technical monitor for the RDTE part was Dr. Larry Schindler (CEMP-EC) and for the reimbursable part was Ms. Val Corbridge (DAEN-ZCF-R).

The work was performed by the Facility Systems Division (FS), U.S. Army Construction Engineering Research Laboratory (USACERL). The Principal Investigators were Dr. Edgar Neely and Mr. Robert Neathammer (USACERL-FS). The primary contractor for much of the data development was the Department of Architectural Engineering, Pennsylvania State University. Dr. Michael O'Connor is Chief of USACERL-FS.

COL Everett R. Thomas is Commander and Director of USACERL, and Dr. L.R. Shaffer is Technical Director.

CONTENTS

SF 298	1
FOREWORD	2
1 INTRODUCTION	5
Background	
Research Performed and Reports Published	
Objective	
Approach	
Scope	
Mode of Technology Transfer	
2 PROBLEM DEFINITION	11
3 DATA BASE DEVELOPMENT	12
Building Subdivisions	
Task Development	
Component Index	
Detailed Task Tables	
Summary Task Tables	
4 DATA BASE APPLICATION EXAMPLE	16
5 PROCEDURES FOR DEVELOPING TASKS	17
REFERENCES	20
LIST OF ACRONYMS	21
APPENDIX A: Task Data Base Index	23
APPENDIX B: Geographical Location Adjustment Factors	27
APPENDIX C: Task Data Base Detailed Resource Tables	37
APPENDIX D: Task Data Base Resource Summary Tables	357
DISTRIBUTION	



MAINTENANCE TASK DATA BASE FOR BUILDINGS: HEATING, VENTILATING, AND AIR CONDITIONING (HVAC) SYSTEMS

1 INTRODUCTION

Background

Maintenance* and repair (M&R) cost estimates are needed during planning, design, and operations/maintenance of Army facilities. During planning, life-cycle costs are needed to evaluate alternative ways of meeting requirements (e.g., lease, new construction, renovate existing facilities). During design, M&R requirements for various types of components, such as built-up or shingle roofs, are needed so that the total life-cycle cost of different designs can be minimized. Finally, once the facility has been constructed, outyear predictions of maintenance and repair costs are needed so that enough funds can be programmed to ensure that Army facilities are maintained properly and do not deteriorate due to lack of maintenance.

The Directorate of Engineering and Construction (EC), Headquarters, U.S. Army Corps of Engineers (HQUSACE)**, asked the U.S. Army Construction Engineering Research Laboratory (USACERL) to coordinate the assembly of a single centralized maintenance and repair data base for use by Corps designers. This research was required because designers were not able to obtain reliable maintenance and repair data to support their life-cycle cost (LCC) analysis from installations or from the technical literature. One of the first tasks in the research effort was to determine if reliable data bases, which could be adapted for Corps use, existed in government or private industry. Comprehensive data bases of maintenance costs for government and private sector facilities did not exist. The little data available always depended on widely varying standards of maintenance used to maintain the facilities for which the data was collected and thus was unreliable for prediction purposes. Recognizing this, HQUSACE asked USACERL to develop a maintenance and repair cost data base. This data is for use by U.S. Army Corps of Engineers (USACE) designers in performing life-cycle cost analyses during the design of new facilities. Initial results were presented in several USACERL reports.¹

Soon after this request, the Facilities Programming and Budgeting Branch of the Facilities Engineering Directorate asked USACERL to develop prediction models for outyear maintenance requirements of the Army facility inventory. The Programming Office of EC, responsible for Military Construction, Army (MCA) planning, also requested that USACERL provide methods and automated tools to help installations perform economic analyses. Part of the objective was to allow analysts to obtain future maintenance cost data.

*Maintenance in this report means all work required to keep a facility in good operating condition; it includes all maintenance, repair, and replacement of components required over the life of a facility.

**At the time of this request, EC was part of the Office of the Chief of Engineers, which has since reorganized. In addition, EC has now become the Directorate of Military Programs.

¹ R.D. Neathammer, *Life-Cycle Cost Database Design and Sample Cost Data Development*, Interim Report P 120/ADA0997222 (U.S. Army Construction Engineering Research Laboratory [USACERL], February 1981); R.D. Neathammer, *Life-Cycle Cost Database: Vol I, Design*, and *Vol II, Sample Data Development*, Technical Report P-139/ADA126644 and ADA126645 (USACERL, January 1983), Appendices E through G.

In response to these requests, USACERL began a multiyear effort to develop a comprehensive maintenance and repair cost research program for buildings. This coordinated program is the key to all detailed estimation of future maintenance costs for Army facilities.

Research Performed and Reports Published

This is one of several interrelated reports addressing maintenance resource prediction in the facility life-cycle process. The total research effort is described in a USACERL Technical Report.²

The first research product was a data base containing maintenance tasks related to every building construction component. This data base provides labor, material, and equipment resource information. The frequency of task occurrence is also included. This information is published in a series of four USACERL Special Reports by engineering systems: (1) architectural, (2) heating, ventilating, and air-conditioning (HVAC), (3) plumbing, and (4) electrical. The title for the series is *Maintenance Task Data Base for Buildings*.³ Table 1 shows an example from this data base. This data is also available in electronic form. The data base is used in a personal computer (PC) system under the Disk Operating System (DOS). This computer program allows a facility to be defined by entering the components and component quantities comprising the facility. The tasks are used to determine the resources required annually to keep the facility maintained.

The second research product was a component resource summary for the first 25 years of a facility. The tasks for the component were scheduled and combined into one set of annual resource requirements. This annual resource information is published in a series of four USACERL Special Reports titled *Building Component Maintenance and Repair Data Base*.⁴ An example from this data base is shown in Table 2. The data base is also available in electronic form. This data can be used to perform special economic analyses such as one for a 20-year life using a 10 percent discount rate.

The third research product was a set of 25-year present worth factor tables for use by designers in selecting components for discount rates of 7 and 10 percent. The annual component resource values were multiplied by the appropriate present worth factor and added for the 25 years to produce one set of resource values. This information is published in a series of four USACERL Special Reports titled

² E.S. Neely, R.D. Neathammer, J.R. Stirn, and R.P. Winkler, *Maintenance Resource Prediction in the Facility Life-Cycle Process*, Technical Report P-91/10 (USACERL, March 1991).

³ E.S. Neely, R.D. Neathammer, J.R. Stirn, and R.P. Winkler, *Maintenance Task Data Base for Buildings: Plumbing Systems*, Special Report P-91/18 (USACERL, May 1991); E.S. Neely, R.D. Neathammer, J.R. Stirn, and R.P. Winkler, *Maintenance Task Data Base for Buildings: Electrical Systems*, Special Report P-91/25 (USACERL, May 1991), and E.S. Neely, R.D. Neathammer, J.R. Stirn, and R.P. Winkler, *Maintenance Task Data Base for Buildings: Architectural Systems*, Special Report P-23 (USACERL, May 1991).

⁴ E.S. Neely, R.D. Neathammer, J.R. Stirn, and R.P. Winkler, *Building Component Maintenance and Repair Data Base for Buildings: Architectural Systems*, Special Report P-91/27 (USACERL, May 1991); E.S. Neely, R.D. Neathammer, J.R. Stirn, and R.P. Winkler, *Building Component Maintenance and Repair Data Base for Buildings: Heating, Ventilation, and Air-Conditioning Systems*, Special Report P-91/22 (USACERL, May 1991); E.S. Neely, R.D. Neathammer, J.R. Stirn, and R.P. Winkler, *Building Component Maintenance and Repair Data Base for Buildings: Plumbing Systems*, Special Report P-91/30 (USACERL, May 1991); E.S. Neely, R.D. Neathammer, J.R. Stirn, and R.P. Winkler, *Building Component Maintenance and Repair Data Base for Buildings: Electrical Systems*, Special Report P-91/19 (USACERL, May 1991).

Table 1

Typical Task Data Form

Task Code: 0991551Component: CHILLER WAT.COOL REC.200T System: COOLING GENERATION Subsystem: EQUIPMENTTask Description: M/R REPAIR HERMETIC CHILLERUnit of Measure: COUNTPersons per Team: 4 Task Duration: 4,5175 hoursTrade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hours
1. REPAIR CONTROLS	0.500000
2. REMOVE/REPLACE COMPRESSOR(2)	11.600000
3. REMOVE/REPL. EVAPORATOR TUBE	0.900000
4. REMOVE/REPLACE CONDENSER TUBE	0.900000

Material Resources

Description	Quantity	Unit Cost
COMPRESS	2	20700.0000
EVAP. TUBE	1	100.0000
COND. TUBE	1	100.0000
		41600.0000

FREQUENCY OF OCCURRENCE

ZONE	HIGH	AVERAGE	LOW
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor Hours		13.900000	4.170000	18.070000
Material Cost \$		41600.000000		41600.000000
Equipment Hours				4.517500
Components in This Task: 0991550				

Table 2
Typical Component Summary

CACES No.: 099155 -Chiller Wat.Cool Rec-200T 099161-Chill. Hermetic Cent. 100T

Labor Hours	Materials \$	Equipment Hours	YR	Labor Hours	Materials \$	Equipment Hours
22.7500	0.0000	11.3750	1	33.1500	0.0000	16.5750
22.7500	0.0000	11.3750	2	33.1500	0.0000	16.5750
22.7500	0.0000	11.3750	3	33.1500	0.0000	16.5750
22.7500	0.0000	11.3750	4	33.1500	0.0000	16.5750
22.7500	0.0000	11.3750	5	33.1500	0.0000	16.5750
22.7500	0.0000	11.3750	6	33.1500	0.0000	16.5750
22.7500	0.0000	11.3750	7	33.1500	0.0000	16.5750
22.7500	0.0000	11.3750	8	33.1500	0.0000	16.5750
22.7500	0.0000	11.3750	9	33.1500	0.0000	16.5750
40.8200	44096.0000	15.8925	10	49.9200	22331.0200	24.9600
22.7500	0.0000	11.3750	11	33.1500	0.0000	16.5757
22.7500	0.0000	11.3750	12	33.1500	0.0000	16.5750
22.7500	0.0000	11.3750	13	33.1500	0.0000	16.5750
22.7500	0.0000	11.3750	14	33.1500	0.0000	16.5750
22.7500	0.0000	11.3750	15	33.1500	0.0000	16.5750
22.7500	0.0000	11.3750	16	33.1500	0.0000	16.5750
22.7500	0.0000	11.3750	17	33.1500	0.0000	16.5750
22.7500	0.0000	11.3750	18	33.1500	0.0000	16.5750
22.7500	0.0000	11.3750	19	33.1500	0.0000	16.5750
74.1000	53000.0000	18.5250	20	62.4000	37789.0000	15.6000
22.7500	0.0000	11.3750	21	33.1500	0.0000	16.5750
22.7500	0.0000	11.3750	22	33.1500	0.0000	16.5750
22.7500	0.0000	11.3750	23	33.1500	0.0000	16.5750
22.7500	0.0000	11.3750	24	33.1500	0.0000	16.5750
22.7500	0.0000	11.3750	25	33.1500	0.0000	16.5750

All data is per unit.

*Building Maintenance and Repair Data for Life-Cycle Cost Analyses.*⁵ Table 3 shows an example from this data base. The data base is also available in electronic form. The first three resource columns provide data to allow designers to calculate the life-cycle costs at any location by multiplying by the correct labor rate, equipment rate, and material geographic factor. The multiplication and addition have been performed for the Military District of Washington, DC, and results are given in the fourth column of the table. The right section of the table is information that can be entered into computer systems that perform life-cycle cost analysis.

⁵ E.S. Neely, R.D. Neathammer, J.R. Stim, and R.P. Winkler, *Building Maintenance and Repair Data for Life-Cycle Cost Analyses: Architectural Systems*, Special Report P-91/17 (USACERL, May 1991); E.S. Neely, R.D. Neathammer, J.R. Stim, and R.P. Winkler, *Building Maintenance and Repair Data for Life-Cycle Cost Analyses: Heating, Ventilation, and Air-Conditioning Systems*, Special Report P-91/20 (USACERL, May 1991); E.S. Neely, R.D. Neathammer, J.R. Stim, and R.P. Winkler, *Building Maintenance and Repair Data for Life-Cycle Cost Analyses: Plumbing Systems*, Special Report P-91/24 (USACERL, May 1991); E.S. Neely, R.D. Neathammer, J.R. Stim, R.P. Winkler, *Building Maintenance and Repair Data for Life-Cycle Cost Analyses: Electrical Systems*, Special Report P-91/26 (USACERL, May 1991).

Table 3
Life-Cycle Cost Analysis

EPG BASED MAINTENANCE AND REPAIR COST DATA FOR USE											PAGE 15		
COMPONENT DESCRIPTION	PRESENT WORTH OF ALL 25 YEAR MAINTENANCE AND REPAIR COSTS (3 = 10%)				ANNUAL MAINTENANCE AND REPAIR PLUS HIGH COST REPAIR AND REPLACEMENT COSTS								
	UM	By Resources			Washington DC Total			Annual Maintenance and Repair			Replacement and High Costs Tasks		
		labor	material	equipment	labor	material	equipment	Yr	labor	material	equipment		
CHILLER WAT COOL REC 50T	U	121 17900	5275 38580	83 25680	8875 42	0 00000	11 1877	20	48 13000	15500 00000	12 02500		
REPAIR HERMETIC CHILLER								10	18 07000	11235 00000	6 02000		
CHILLER WAT COOL REC 100T	U	174 22440	11988 78020	83 57251	15650 10	0 00000	11 18877	20	74 19000	27200 00000	18 51500		
REPAIR HERMETIC CHILLER								10	18 07000	29644 00000	4 51750		
CHILLER WAT COOL REC 10T	U	147 40002	1651 11960	73 29109	4756 36	0 00000	9 91006	20	20 80000	5300 00000	5 20000		
REPAIR HERMETIC CHILLER								10	10 53000	3397 00000	5 55000		
CHILLER WAT COOL REC 200T	U	174 22440	19602 56480	83 57251	22242 98	0 00000	11 18877	20	74 19000	53000 00000	18 52500		
REPAIR HERMETIC CHILLER								10	18 07000	44096 00000	4 51750		
CHILL HERMETIC CENT 100T	U	11209 2 578	245 62859	120 98754	16381 26	0 00000	16 30364	20	62 40000	37789 00000	15 50000		
REPAIR CHILLER								10	16 27000	27031 07000	5 38500		
CHILL HERMETIC CENT 300T	U	249 5803	27457 2508	121 90610	32709 15	0 00000	16 30354	20	97 50000	61771 50000	24 37500		
REPAIR CHILLER								10	16 25000	66569 06000	8 12500		
CHILL HERMETIC CENT 900T	U	257 35000	75437 35008	123 91796	80847 07	0 00700	16 30364	10	162 50000	127200 00000	40 62500		
REPAIR CHILLER								10	16 77000	199283 80000	8 38500		
CHILL OPEN CENT 300T	U	625 20542	27457 2508	311 24890	40690 58	0 30000	42 51720	20	97 50000	61771 50000	24 37500		
REPAIR CHILLER								10	28 27000	66569 06000	14 10500		
CHILL OPEN CENT 900T	U	257 35000	75437 35008	123 91796	80847 07	0 00000	16 30354	20	162 50000	127200 00000	40 62500		
REPAIR CHILLER								10	16 77000	199283 15000	8 38500		

A fourth research product was a PC system that allows facilities to be modeled by entering the components that comprise the facility. Future years resource predictions are produced by applying the individual tasks and then forming resource summaries by subsystems, systems, facilities, installations, reporting installations, Major Commands (MACOMS) and Army. A summary level computer system was also developed for use by the Department of the Army (DA) and MACOMS. The summary level system applies the most basic data contained in the current facility real property inventory files: (1) current facility use, (2) floor area, and (3) construction date. Users and systems manuals will be published as USACERL ADP Reports.

Objective

The objective of this report is to describe the task development process for HVAC systems and give examples for using these tasks.

Approach

The first activity in the research was to survey the literature for available maintenance data. No comprehensive task resource data base was located. The Navy has developed a series of manuals dealing with labor hours required to perform several basic maintenance tasks. This work has been adopted by the Department of Defense (DOD) for triservice use. A series of Technical Bulletins (TBs) under the general title *Engineered Performance Standards* has been published.

The next activity was to survey USACE District offices to solicit their input for a data base. A guiding committee composed of District personnel, installation representatives, and private sector consultants met and agreed upon a general data base design. More importantly, they recommended that the data base be developed using the Engineered Performance Standards rather than historical data.

Once the data base was developed, component summaries were created by summing all tasks for a component. These summaries were then input into a program that computed present worth values for each component.

The calculation procedures described in this report were performed and summarized for standard Army life-cycle analysis of 25 years with a 7 or 10 percent present worth factor. Final results are published in the USACERL Special report series *Building Maintenance and Repair Data Base for Life-Cycle Analyses*.

Scope

The task data base is for DOD designers and can also be used by those in the private sector.

Mode of Technology Transfer

The tables pertinent to designer use will be issued as a supplement to Technical Manual (TM) 5-802-1, *Economic Studies for Military Construction Design—Applications*.

2 PROBLEM DEFINITION

In the facility life-cycle process, costs are incurred in construction, operation, maintenance, and disposal of a facility. Past emphasis during the planning, design, and construction phases has been on estimating initial construction costs. The impact of operating and maintaining facilities has always been a secondary consideration. In many cases, the operation and maintenance (O&M) costs are far greater than initial construction costs. Building owners are concerned with the total ownership costs of facilities rather than just the initial construction costs.

The Army has realized the importance of performing total life-cycle cost analyses for facilities at the design stage of accurately forecasting these costs for funds programming. HQUSACE asked USACERL in 1980 to develop a method of estimating future maintenance costs for buildings. In 1982, the programming branch of the former Facilities Engineering Directorate asked USACERL to develop effective models for forecasting facility maintenance resource requirements based on the actual facility.

Life-cycle cost economic studies are an integral part of facility design in the MCA program. Requirements for performing these studies are given in:

- Statutes, Code of Federal Regulations, and Executive Orders for performing analyses when energy is a key cost and for wastewater treatment plants
- USACE *Architectural and Engineering Instructions: Design Criteria*
- Army Regulation (AR) 11-28, *Economic Analysis and Program Evaluation for Resource Management* for general economic analyses.
- TM 5-802-1, *Economic Studies for Military Construction Design—Applications*

The main purpose of these studies is to minimize the life-cycle costs of Army facilities.

To perform life-cycle cost analyses on facility designs, three categories of costs are needed: initial, operating, and maintenance. Initial costs are usually easy to estimate through existing cost estimating systems such as the Corps of Engineers Computer Assisted Cost Estimating System (CACES) and standard publications such as Means or Dodge. Operating costs can be estimated by using energy consumption models such as the Corps of Engineers Building Loads Analysis and System Thermodynamics (BLAST) program or the Trane Company's Trace program. However, accurate estimates of maintenance costs are not available.

There are no comprehensive data bases of maintenance costs for building components either in the private sector or State/Federal Governments. Some historical data is available from the Building Owners' and Managers' Association reports. Within the Army, the Integrated Facilities System (IFS) contains some historical data; however, it does not have a feature for retaining several types of a building component (e.g., having brick and wood exteriors or three types of floor covering). Moreover, the data in IFS has not been kept current. For example, at one installation several family housing units were shown as having wood siding when, in fact, they had been covered with aluminum siding several years earlier.

3 DATA BASE DEVELOPMENT

The first step in data base development was to subdivide a building into systems, subsystems, and components, and define maintenance tasks. The second step was to schedule each task and to estimate resources for each task.

Building Subdivisions

The UNIFORMAT method of dividing a building into systems, subsystems, and components was adopted since it is used by most Federal agencies and many private organizations. Systems requiring little maintenance such as foundations and superstructure were not subdivided.

The level of component detail was determined by maintenance and design personnel. This level varied, depending on the facility classification (e.g., historical) and the costs to collect and maintain data versus the benefit. Appendix A contains a complete list of the subdivisions. Major HVAC categories are:

- 09 Heating, Ventilation & Air Conditioning
- 091 Natural Gas Systems
- 092 Fuel Oil Systems
- 093 LPG Systems
- 094 Steam Systems
- 095 Chilled Water
- 096 Solar Systems
- 097 Other Generation Systems
- 098 Heating Generation Systems
- 099 Cooling Generation Systems
- 09A Heating and Cooling Generation
- 09B Ventillation Systems
- 09C Exhaust Systems
- 09D Special Systems
- 09E Controls and Instrumentation
- 09F Testing, Balance, etc.

Task Development

The primary objective was to develop a data base that is neither time- or cost-dependent. A data base independent of time would also be unaffected by inflation. This condition was achieved for labor and equipment resources through the use of hours. The number of labor hours and equipment hours for a task depends only on the current rates when an LCCA is performed. This process was not possible for material costs.

A typical task data form is shown in Table 1. The Engineered Performance Standards (EPS) adopted by all DOD agencies were used to determine labor resources. A USACERL Technical Report contains a full explanation of use of EPS in developing these resources.⁶

⁶ E.S. Neely, et al., TR-P-91/10 (USACERL, March 1991).

Standard references such as DA criteria documents, Corps of Engineers Unit Price Manuals, Means, and Dodge were used to determine the Washington, DC, area material costs. Material costs in the data base are given in July 1985 dollars for this area. Material costs can be adjusted for site location by applying a geographic location adjustment factor similar to the values shown in Appendix B. Material costs can be adjusted for inflation by applying a time adjustment factor from July 1985 to the new point in time.

Task frequencies are the most subjective portion of the data base and were determined by applying professional experience, trade publication data, and data in manufacturers' literature. A range of values is given to provide more information than one average frequency.

The first activity was to list all maintenance tasks that occur during the life of each component. The next step was to develop resource data for each task. The five sets of elements shown in Figure 1 were needed for developing each task: (1) unit of measure, (2) frequency of occurrence, (3) labor hours, (4) equipment hours, and (5) material costs.

1. Unit of measure. A standard unit of measure for each component was selected based on commonly accepted measurement methods, the measurement units used within IFS, and the level of detail supported by the maintenance personnel. The standard unit of measure was one piece of equipment or one system.

2. Frequency of occurrence. The frequency of occurrence for tasks is the most subjective element in the data base. The data base developers used their experience and information from journals, reports, and manufacturers to estimate task frequencies.

3. Labor hours. The primary source of labor requirements was the EPS, which are approved for use by all DOD agencies. EPS are based on either methods-time-measurement studies or work sampling studies. Using these techniques, times for performing subtasks were estimated and combined to provide total task times.

The following EPS sources were used:

TB 420-8, *HVAC Handbook*, February 1982

TB 420-20, *Pipefitting & Plumbing Handbook*, August 1983

TB 420-12, *Machine Shop and Machine Repairs Handbook*, April 1983.

When information was not available within EPS, the data was developed from existing trade journals, reports, and other publications.

4. Material resources. The amounts of materials needed were normally based on EPS and contractor experience. Material costs were taken from CACES, Means, Dodge, and other references.

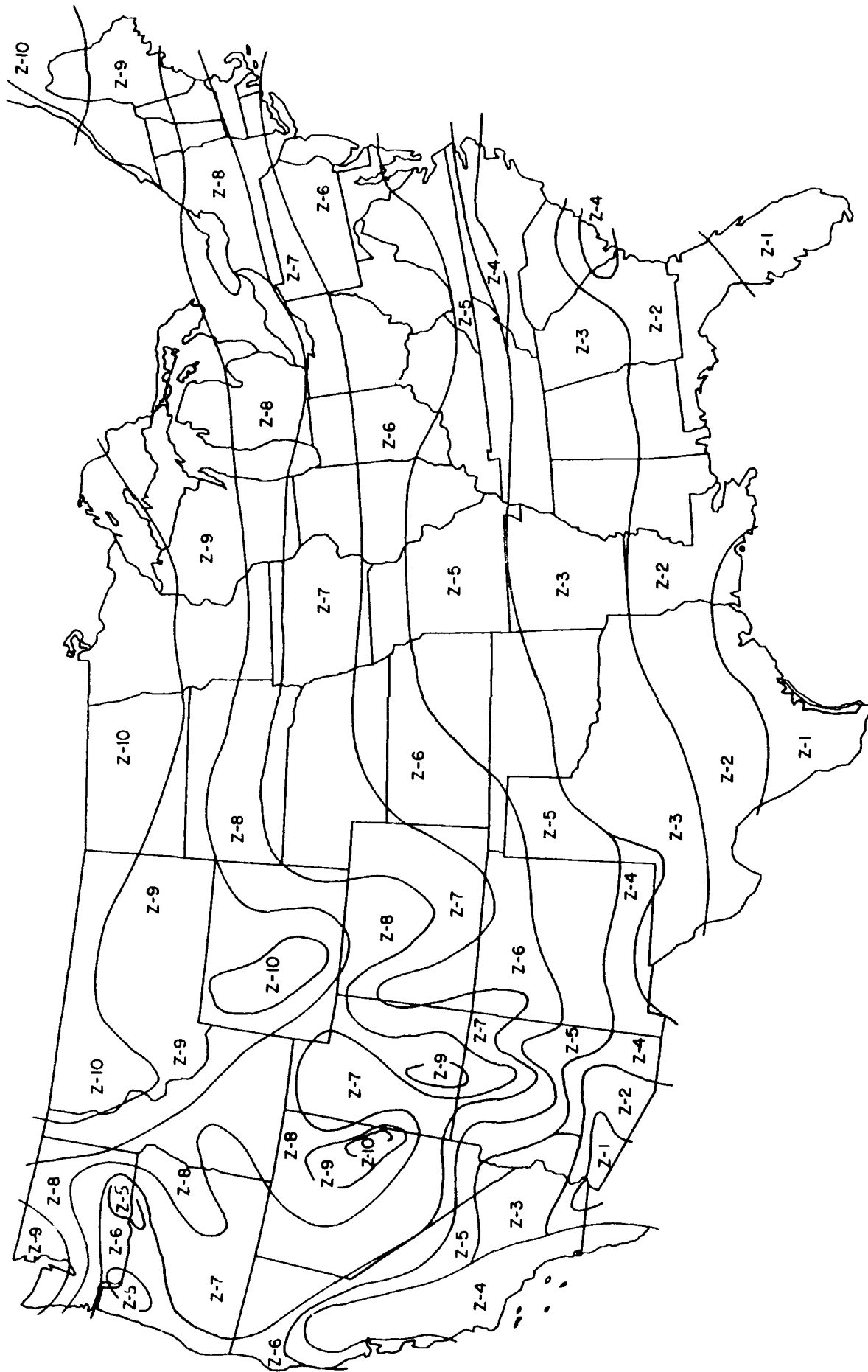


Figure 1. HVAC zone map.

5. Equipment resources. The equipment hours required for maintenance trucks were developed by dividing the total labor hours for the task by the normal crew size used on the task.

The data base has been reviewed by 13 different maintenance organizations and has been determined to accurately represent the resources required to perform the tasks.

Component Index

Appendix A lists all systems, subsystems, and components in the data base.

Appendix B gives geographical location adjustment factors.

Detailed Task Tables

Appendix C gives detailed resources by subtask for each task.

Summary Task Tables

Appendix D contains summary data from Appendix C. The half page per task given in Appendix C has been summarized into one line in Appendix D. This data includes the CACES number, task description, unit of measure, trade code, task classification (major or minor), the average, high, and low frequencies of task occurrence, labor hours, material costs, and equipment hours.

4 DATA BASE APPLICATION EXAMPLE

The task information can be used to calculate resources to perform the tasks for programming, planning, and staffing. These detailed task tables normally should not be used in performing life-cycle cost analyses. Tables given in the USACERL Special Report series *Building Maintenance and Repair Data for Life-Cycle Cost Analysis* are more appropriate for standard 25-year life-cycle cost analysis using either 7 or 10 percent discount rate. Tables in the USACERL Special Report series *Building Component Maintenance and Repair Data Base* can be used for other life-cycle cost analyses.

The example below is to calculate the cost to repair a number of hermetic chillers, given the following information:

Number of chillers	2
Labor rate	\$18.50/hr
Geographic location factor	1.05
Equipment rate	\$3.60/hr

Task data for this example is shown in Table 1. The calculation is: (Labor hr/chiller x Labor rate \$/hr + Material cost in Washington, DC dollars/chiller x Geographic location factor + Equipment hr/chiller) x Number of chillers. Substituting the above data:

$$(18.07 \text{ hr/chiller} \times \$18.50/\text{hr} + \$41600.00 \times 1.05 + 4.5175 \text{ hr/chiller} \times \$3.60/\text{hr} = \$44030.56/\text{chiller}) \times 2 \text{ chillers} = \$88061.12 \quad [\text{Eq 1}]$$

5 PROCEDURES FOR DEVELOPING TASKS

HVAC resources vary with the climatic zones shown in Figure 1. Resource information by zone is given for HVAC components in Appendices A and B. For all examples given we assume the use to be in climatic zone 6.

The task development procedures can be demonstrated by using the existing task number 0991551, "Repair Hermetic Chiller," as shown in Table 1. This task involves repairing the controls, and replacing the compressor, evaporation tube, and the condenser tube.

The first step of repairing a hermetic chiller is to repair the controls. A review of EPS subtasks enabled us to estimate the labor rate from TB 420-6 GT-190, page 153, as shown in Table 4. The table gave the labor rate as .51121 hr/job, or .50000 hr/job.

The task of removing the old compressor and replacing it was found in TB 420-8, Table VT-6, page 41, as shown in Table 5 and is 5.82358 hrs/system. The hermetic chiller has 2 compressors so the labor rate was doubled to 11.64716 hr/job, or 11.60000 hr/job.

There was no specific listing in the EPS subtasks for the removal and replacement of either the evaporation tube or the condenser tube. The labor rate was estimated by using TB 420-8, Table VT-270, page 98, as shown in Table 6. It was .89400 hr/job, or .90000 hr/job, for each of the tubes.

The total direct labor hours to perform the entire job would be the sum of all subtasks, or 13.9000 hr/job. The indirect time or the time to plan the work, load the truck at the beginning of the day, unload the truck at the end of the day, personal time, delay time, and material handling time must be included to obtain the total onsite labor time. In EPS, this value is expressed as a percentage of the direct labor. When all factors have been considered, the direct labor should be increased by 30 percent or 4.17000 hr/job.

The steering committee wanted to apply the same material costs for all planning, programming, design, construction, and operations activities. For this research project, all material costs were developed using prices in the Washington, DC area. Material prices for exact locations throughout the world can be obtained by multiplying the Washington, DC area costs by the appropriate location adjustment factor published in a Programming, Administration, and Execution System (PAX) Newsletter under the title "Area Cost Factor Indexes." A copy of the 22 September 1988 indexes are given in Appendix D, Geographical Location Adjustment Factors. The *CACES Unit Price Book* for Region II dated July 1, 1985 has been used for all costs and can be obtained from the Corps District Cost Estimating Section.

In reviewing material prices, there will usually be many grades listed for the component in question. Since only one entry for the component task will be made for the maintenance data base, it is important to use the middle grade for pricing. This will produce an average material cost.

When materials are not given in the CACES manuals, other material pricing manuals, such as Means, should be used to determine the cost. The material costs for the compressors in this example were taken from *CACES Unit Price Book* for Region 2. Two 100 ton compressors at \$20,700.00 were used. The CACES number is 15655-2209. The cost for the evaporation and condensing tubing was \$100 in the *CACES Unit Price Book* for Region 2.

Table 4

Task GT 190*

No.	Reference	Work Unit Description	Hours	Units
1	PWG-4-XXII	Cut, form and align ten wires.	.00132	Box
		10 wire ends per box.	.09156	Box
2	PWG-4-X	Splice, solder and insulate 5 pairs	.07859	Box
		of wire ends.	.39500	Box
		5 splices per box.		

* GT-190 = .51121 hr/box.

Table 5

Task VT-6*

No.	Reference	Work Unit Description	Hours	Units
1	VT-2	Pump down compressor	.38220	System
2	PWMU-1-8552	Remove and install bolts in intake and discharge valves	.17440	System
3	PWQ-1-8011	Remove and install intake and discharge valves	.14640	System
4	PWQ-4-I	Remove and install oil line and gages	.21918	System
5	PWMU-1-8552	Remove and install bolts in valve fittings	.17440	System
6	PWMU-1-8011	Remove and install valve fittings	.14640	System
7	PWMU-1-8010	Plug and unplug port openings	.10480	System
8	PWMU-1-8010	Pull away and push valve to compressor	.05240	System
9	PWMU-1-8000	Remove and install bolts for belt guard	.07120	System
10	PWMU-1-8021	Remove and install belt guard	.04900	System
11	PWMU-1-8553	Loosen and tighten motor base bolts	.06960	System
12	PWMU-1-8010	Remove and install belts	.10480	System
13	PWMU-1-8552	Remove and install compressor base bolts	.08720	System
14	PWN-10-XVI	Remove and install compressor	1.10240	System
15	PWMU-1-8011	Remove and install flywheel	.07320	System
16	VT-1	Charge open (central compression) air conditioning system	.62145	System
			.37890	System
17	PWV-1-II	Put compressor into operation	.95211	System
18	4211	Check operation of system	.29200	System
19	PWA-5-II	Material handling	.62154	System

* VT-190 = 5.82358 hrs/system.

Table 6
Task VT-270*

No.	Reference	Work Unit Description	Hours	Units
1	PWV-15-IV	Remove Boiler Tube up to 20' long and 4" O.D. through manhole/handhole without cutting tube into sections	.28186	Tube
2	PWV-15-V	Install boiler tube up to 20' long and 4" O.D. 5 splices per box.	.61214	Tube

* VT-270 = .89400 hrs/tube.

REFERENCES

- Army Regulation (AR) 11-18, *The Cost and Economic Analysis Program* (Headquarters, Department of the Army [HQDA], 7 May 1990).
- AR 11-28, *Economic Analysis and Program Evaluation for Resource Management* (HQDA, December 1975).
- AR 415-17, *Cost Estimating for Military Programming* (HQDA, 15 February, 1980).
- AR 420-16, *Facilities Engineering Reports* (HQDA, September 30, 1987).
- Military Handbook (MIL-HDBK) 1190, *Facility Planning and Design Guide* (Department of Defense, 1 September, 1987).
- Neathammer, R.D., *Life-Cycle Cost Database Design and Sample Cost Data Development*, Interim Report P-120/ADA0997222 (U.S. Army Construction Engineering Research Laboratory [USACERL], February 1981).
- Neathammer, R.D., *Life-Cycle Cost Database: Vol I, Design, and Vol II, Sample Data Development*, Technical Report P-139/ADA126644 and ADA126645 (USACERL, January 1983), Appendices E through G.
- Neely, E.S., et al., *Building Component Maintenance and Repair Data Base: Architectural Systems*, Special Report P-91/27 (USACERL, May 1991).
- Neely, E.S., et al., *Building Component Maintenance and Repair Data Base: Electrical Systems*, Special Report P-91/19 (USACERL, May 1991).
- Neely, E.S., et al., *Building Component Maintenance and Repair Data Base: Heating, Ventilation, and Air-Conditioning Systems*, Special Report P-91/22 (USACERL, May 1991).
- Neely, E.S., et al., *Building Component Maintenance and Repair Data Base: Plumbing Systems*, Special Report P-91/30 (USACERL, May 1991).
- Neely, E.S., et al., *Building Maintenance and Repair Data for Life-Cycle Cost Analyses: Architectural Systems*, Special Report P-91/17 (USACERL, May 1991).
- Neely, E.S., et al., *Building Maintenance and Repair Data for Life-Cycle Cost Analyses: Electrical Systems*, Special Report P-91/26 (USACERL, May 1991).
- Neely, E.S., et al., *Building Maintenance and Repair Data for Life-Cycle Cost Analyses: Heating, Ventilation, and Air-Conditioning Systems*, Special Report P-91/20 (USACERL, May 1991).
- Neely, E.S., et al., *Building Maintenance and Repair Data for Life-Cycle Cost Analyses: Plumbing Systems*, Special Report P-91/24 (USACERL, May 1991).
- Neely, E.S., et al., *Maintenance Resource Prediction in the Facility Life-Cycle Process*, Technical Report P-91/10 (USACERL, March 1991).
- Neely, E.S., et al., *Maintenance Task Data Base for Buildings: Architectural Systems*, Special Report P-91/23 (USACERL, May 1991).

Neely, E.S., et al., *Maintenance Task Data Base for Buildings: Electrical Systems*, Special Report P-91/25 (USACERL, May 1991).

Neely, E.S., et al., *Maintenance Task Data Base for Buildings: Plumbing Systems*, Special Report P-91/18 (USACERL, May 1991).

Shahin, M.Y. and S.D. Kohn, *Overview of the "PAVER" Pavement Maintenance Management System*, Technical Manuscript M-310/ADA115311 (USACERL, March 1982).

TM 5-802-1, *Economic Studies for Military Construction--Applications* (HQDA, 31 December 1986).

LIST OF ACRONYMS

ACE	Assistant Chief of Engineers
AMS	Army Management System
APC	Account Processing Code
AR	Army Regulation
ARR	Annual Requirements Report
ASTM	American Society for Testing and Materials
BLAST	Building Loads Analysis and System Thermodynamics
BMAR	Backlog of Maintenance and Repair
CA	Commercial Activities
CACES	Computer-Assisted Cost Estimating System
CONUS	Continental United States
DA	Department of the Army
DEH	Directorate of Engineering and Housing
DOD	Department of Defense
EA	Economic Analysis
EPS	Engineered Performance Standards
HQ-IFS	Headquarters - Integrated Facilities System
HQDA	Headquarters Department of the Army

LIST OF ACRONYMS (Cont'd)

IFS	Integrated Facilities System
IJO	Individual Job Order
LCC	Life-Cycle Cost
LCCID	Life-Cycle Cost in Design
M&R	Maintenance and Repair
MACOM	Major Command
MCA	Military Construction, Army
MRPM	Maintenance Resource Prediction Model
OCE	Office of the Chief of Engineers
PAVER	Pavement Maintenance Management System
PC	Personal Computer
PM	Preventive Maintenance
R&D	Research and Development
RAM	Random Access Memory
RMF	Recurring Maintenance Factor
RPI	Real Property Inventory
RPLANS	Real Property Planning System
RPMS	Real Property Management System
SO	Service Order
STANFINS	Standard Army Financial System
TB	Technical Bulletin
URR	Unconstrained Requirements Report
USACE	U.S. Army Corps of Engineers
USACERL	U.S. Army Construction Engineering Research Laboratory
USAEHSC	U.S. Army Engineering and Housing Support Center

APPENDIX A:
TASK DATA BASE INDEX

Army Wide Tree Listing Report DATE: 07/25/88 Page 1

Cases No : Unit of Measure : Description

0900000 HEATING, VENTILATION AND AIRCONDITIONING
 0910000 NATURAL GAS SYSTEMS
 0911000 EQUIPMENT/METERS/REGULATORS, NAT. GAS
 0911100 1 GAS METER
 0912000 PIPING SYSTEMS, NATURAL GAS SYS.
 0912100 4 PIPE FITTINGS, STEEL/IRON
 0912200 1 PRESS. REDUCING VALVE .5 INCH
 0912300 1 PRESSURE REDUCING VALVE, 2"
 0920000 FUEL OIL SYSTEMS
 0921000 STORAGE SYSTEMS, FUEL OIL SYS.
 0921100 1 OIL STORAGE TANK, 275 GAL.
 0921200 1 STORAGE SYSTEMS, FUEL OIL FILTER
 0921300 1 STORAGE SYSTEMS, FUEL OIL GAUGE
 0922000 TRANSFER SYSTEMS, FUEL OIL SYS.
 0923000 DISTRIBUTION SYSTEMS, FUEL OIL SYS.
 0923100 4 PIPE/FITTINGS, COPPER
 0930000 LPG SYSTEMS
 0931000 STORAGE SYSTEMS, LPG SYS.
 0931100 1 LPG STORAGE TANK, 1000 GALLON
 0932000 TRANSFER SYSTEMS, LPG SYS.
 0933000 DISTRIBUTION SYSTEMS, LPG SYS.
 0933100 4 PIPE/FITTINGS, STEEL/IRON
 0940000 STEAM (SUPPLIED FROM CENTRAL)
 0941000 PRESSURE REDUCING REG. SYS., STEAM SYS.
 0941100 1 STEAM CONVERTOR, LESS THAN 300,000
 0941200 1 FLASH TANK, 24 GALLON
 0941300 1 STEAM REGULATION VALVE - 2"
 0941500 1 COND.METER <300#/HR
 0942000 DISTRIBUTION SYSTEMS, STEAM SYS.
 0942100 1 RADIATOR VALVE, 1"
 0943000 METAL RADIATORS (IN 10 FT. SECTIONS)
 0943100 1 CAST IRON RADIATOR 10 SECT
 0943200 1 BASEBOARD RADIATION 10 FT
 0943300 1 FINNED RADIATOR, WALL 10 FT
 0950000 CHILLED WATER (SUPPLIED FROM CENTRAL)
 0960000 SOLAR SYSTEMS
 0961000 EQUIPMENT, SOLAR SYSTEMS
 0961100 1 SOLAR PANEL, 3' X 8'
 0961200 1 SOLAR STORAGE TANK, 1000 GALLON
 0962000 PIPING, SOLAR SYSTEMS
 0962100 4 PIPE/FITTINGS, PVC
 0970000 OTHER GENERATION SYSTEMS
 0980000 HEATING GENERATION SYSTEMS
 0981000 EQUIPMENT, HEATING GENERATION
 0981100 1 BOILER (GAS)
 0981110 1 250 BTU
 0981120 1 2000 BTU

Cases No : Unit of Measure : Description

0981130 1 10000 BTU
 0981200 1 BOILER (COAL)
 0981210 1 40000 BTU
 0981220 1 100000 BTU
 0981300 1 BOILER (OIL)
 0981310 1 250 BTU
 0981320 1 2000 BTU
 0981330 1 10000 BTU
 0981400 1 BOILER DUAL FIRED
 0981410 1 2000 BTU
 0981420 1 20000 BTU
 0981500 1 BOILER PNEUMATIC COAL SPREADER
 0981510 1 BOILER PNEUMATIC COAL SPREADER
 0981600 1 ASH HANDLING SYSTEM
 0981610 1 ASH HANDLING SYSTEM
 0981700 1 FUEL OIL EQUIPMENT
 0981710 1 FUEL OIL EQUIPMENT
 0981800 1 CHEMICAL FEED SYSTEM
 0981810 1 CHEMICAL FEED SYSTEM
 0981900 1 FEED WATER SUPPLY
 0981910 1 FEEDWATER SUPPLY
 0981A00 1 DEAERATOR
 0981A10 1 DEAERATOR
 0981B00 1 BLOWOFF SYSTEM
 0981B10 1 BLOWOFF SYSTEM
 0981C00 1 HOUSE FURNACE (GAS)
 0981C10 1 25 KBTU
 0981C20 1 100 KBTU
 0981C30 1 200 KBTU
 0981D00 1 HOUSE FURNACE (OIL)
 0981D10 1 25 KBTU
 0981D20 1 100 KBTU
 0981D30 1 200 KBTU
 0981E00 1 HOUSE FURNACE (ELECTRIC)
 0981E10 1 25 KBTU
 0981E20 1 100 KBTU
 0981E30 1 200 KBTU
 0981F00 1 RADIATOR, CAST IRON 10' SEC.
 0981G00 1 RADIATOR, BASEBOARD 10' SEC.
 0981H00 1 RADIATOR, FINNED WALL 10' SEC.
 0981I00 1 EXPANSTION TANK
 0981J00 1 STEAM CONVERTOR, <300,000
 0981J10 1 STEAM CONVERTOR, <300,000
 0981K00 1 FLASH TANK
 0981K10 1 FLASH TANK
 0981L00 1 STORAGE TANK, DWV
 0981M00 1 INDUCTION FURNACE GAS/OIL
 0981M10 1 INDUCTION FURNACE GAS/OIL 500 MBU
 0981M20 1 INDUCTION FURNACE GAS/OIL 2000 MBU
 0981N00 1 SURGE TANK 1000 GALLON
 0982000 FIXTURES, HEATING GENERATION
 0983000 INTERCONNECTING PIPING SYSTEM, HEAT GEN.
 0984000 DISTRIBUTION PIPING SYSTEM, HEAT GEN.
 0984100 4 PIPE/FITTINGS, ST.&CP
 0984110 4 PIPE/FITTINGS, COPPER
 0984120 4 PIPE/FITTINGS, COPPER
 0984130 4 PIPE AND FITTINGS, PVC

Cases No : Unit of Measure : Description

0984140 4 PIPE INSULATION
 0984200 1 GATE VALVE
 0984210 1 GATE VALVE 3/8"-1 1/2"
 0984220 1 GATE VALVE 2"-3"
 0984280 1 DRAIN VALVE
 0984290 1 RADIATOR VALVE 1"
 09842AC 1 PRESSURE REDUCER VALVE 2"
 0984300 1 PIPE INSULATION
 0984370 1 STEAM TRAP F&T<1"
 09843AO 4 AIR SEPARATOR
 0984400 1 CIRCULATOR PUMP
 0984410 1 CIRCULATOR PUMP <1HP
 0984420 1 CIRCULATION PUMP 5 HP
 0984460 1 COND. RCVR. 10-15 GAL.
 0985000 HVAC VALVES, HEATING GENERATION
 0990000 COOLING GENERATION SYSTEMS
 0991000 EQUIPMENT, COOLING GENERATION
 0991100 1 A/C DX PACKAGED
 0991110 1 5 TONS
 0991120 1 20 TONS
 0991130 1 50 TONS
 0991200 1 A/C WINDOW
 0991210 1 1 TON
 0991220 1 2 TONS
 0991300 1 A/C PAD MOUNTED
 0991310 1 AIR CONDITIONER PAD MOUNT. 5 TON
 0991320 1 AIR CONDITIONER PAD MOUNT. 20 TON
 0991400 1 CHILLERS ACH RECIP
 0991410 1 20 TONS
 0991420 1 50 TONS
 0991430 1 100 TONS
 0991440 1 CHILLER-AIR COOL RECIP. 5T
 0991450 1 CHILLER AIR COOL REC 10T
 0991460 1 CHILLER AIR COOL REC 15T
 0991500 1 CHILLERS WCH RECIP.
 0991510 1 20 TONS
 0991520 1 50 TONS
 0991530 1 100 TONS
 0991540 1 CHILLER WATER COOL RECIP 10T
 0991550 1 CHILLER WATER COOL RECIP 200T
 0991600 1 CHILLERS HERMETIC CENT.
 0991610 1 100 TONS
 0991620 1 300 TONS
 0991630 1 900 TONS
 0991700 1 CHILLERS OPEN CENTRIFUGAL
 0991710 1 300 TONS
 0991720 1 900 TONS
 0991800 1 CHILLERS DOUBLE RUN HERMETIC
 0991810 1 100 TONS
 0991820 1 300 TONS
 0991830 1 900 TONS
 0991900 1 CHILLERS ONE STAGE ABSORBER
 0991910 1 100 TONS
 0991920 1 300 TONS
 0991930 1 900 TONS
 0991A00 1 CHILLERS TWO STAGE ABSORBER

Cases No : Unit of Measure : Description

0991A10 1 300 TONS
 0991A20 1 900 TONS
 0991800 1 HEAT REJECTION SYSTM AIRCOOLED CONDENSER
 0991810 1 5 TONS
 0991820 1 20 TONS
 0991830 1 50 TONS
 0991840 1 AIR COOLED CONDENSER 100T
 0991C00 1 HEAT REJECTION SYSTEMS COOLING TOWER
 0991C10 1 50 TONS
 0991C20 1 100 TONS
 0991C30 1 300 TONS
 0991C40 1 900 TONS
 0991D00 1 HEAT REJECTION SYSTEMS EVAPORATIVE COMO
 0991D10 1 20 TONS
 0991D20 1 100 TONS
 0991D30 1 300 TONS
 0991E00 1 EXPANSION TANK
 0991F00 1 REFRIGERATION FAN COILS
 0991F10 1 REFRIGERATION FAN COIL 1T
 0991F20 1 REFRIGERATION FAN COIL 3T
 0991F30 1 REFRIGERATION FAN COIL 5T
 0992000 FIXTURES, COOLING GENERATION
 0993000 INTERCONNECTING PIPING SYSTEMS, COOL GEN
 0994000 DISTRIBUTION PIPING SYSTEMS COOL GEN.
 0994100 4 PIPE/FITTINGS
 0994110 4 PIPE/FITTINGS, ST.&CL.
 0994120 4 PIPE/FITTINGS, COPPER
 0994130 4 PIPE AND FITTINGS, PVC
 0994200 1 GATE VALVE
 0994210 1 GATE VALVE 3/8"-1 1/2"
 0994220 1 GATE VALVE 2"-3"
 0994280 1 DRAIN VALVE
 0994300 4 COLLING GENERATION
 0994340 4 PIPE INSULATION
 0994400 1 CIRCULATION PUMP
 0994410 1 CIRC. PUMP 1/12-1/2 H.P.
 0994420 1 CIRCULATION PUMP 5 H.P.
 09A0000 HEATING AND COOLING GENERATION SYSTEMS
 09A1000 EQUIPMENT H & C
 09A1100 1 MULTI-ZONE
 09A1110 1 6500 CFM
 09A1120 1 10000 CFM
 09A1130 1 25000 CFM
 09A1140 1 50000 CFM
 09A1150 1 MULTI-ZONE 2500 CFM
 09A1200 1 DUAL DUCT
 09A1210 1 6500 CFM
 09A1220 1 10000 CFM
 09A1230 1 25000 CFM
 09A1240 1 50000 CFM
 09A1300 1 THREE DECK MULTI-ZONE
 09A1310 1 6500 CFM
 09A1320 1 10000 CFM
 09A1330 1 25000 CFM
 09A1340 1 50000 CFM
 09A1400 1 DUAL DUCT VARIABLE VOLUME

Cases No : Unit of Measure : Description

09A1410 1 6500 CFM
 09A1420 1 10000 CFM
 09A1430 1 25000 CFM
 09A1440 1 50000 CFM
 09A1450 1 DUAL DUCT VARI. VOL. 100,000 CFM
 09A1500 1 VARIABLE VOLUME
 09A1510 1 6500 CFM
 09A1520 1 10000 CFM
 09A1530 1 25000 CFM
 09A1540 1 50000 CFM
 09A1600 1 TERM REHEAT
 09A1610 1 6500 CFM
 09A1620 1 10000 CFM
 09A1630 1 25000 CFM
 09A1640 1 50000 CFM
 09A1700 1 TWO-PIPE INDUCTION
 09A1710 1 6500 CFM
 09A1720 1 10000 CFM
 09A1730 1 25000 CFM
 09A1740 1 50000 CFM
 09A1800 1 FOUR-PIPE INDUCTION
 09A1810 1 6500 CFM
 09A1820 1 10000 CFM
 09A1830 1 25000 CFM
 09A1840 1 50000 CFM
 09A1900 1 TWO-PIPE FAN COIL
 09A1910 1 200 CFM
 09A1920 1 400 CFM
 09A1930 1 600 CFM
 09A1940 1 1200 CFM
 09A1A00 1 FOUR-PIPE FAN-COIL
 09A1A10 1 200 CFM
 09A1A20 1 400 CFM
 09A1A30 1 600 CFM
 09A1A40 1 1200 CFM
 09A1B00 1 UNIT-VENT
 09A1B10 1 400 CFM
 09A1B20 1 1200 CFM
 09A1C00 1 SINGLE-ZONE DRAW THRU
 09A1C10 1 6500 CFM
 09A1C20 1 10000 CFM
 09A1C30 1 25000 CFM
 09A1C40 1 50000 CFM
 09A1C50 1 SINGLE ZONE DRAW THRU 1000 CFM
 09A1C60 1 SINGLE-ZONE DRAW THRU 2500 CFM
 09A1D00 1 UNIT HEATER
 09A1D10 1 400 CFM
 09A1D20 1 1200 CFM
 09A1D30 1 UNIT HEATER 4000 CFM
 09A1D40 1 UNIT HEATER 8000 CFM
 09A1D50 1 GAS FIRED RADIANT HEATER 50 MBH
 09A1E00 1 HEAT PUMP
 09A1E10 1 HEAT PUMP 5 TONS
 09A1E20 1 HEAT PUMP 10 TONS
 09A1E30 1 HEAT PUMP 25 TONS
 09A1E40 1 HEAT PUMP 1T
 09A1G00 1 DUCTCOIL 1-ROW HOT WATER

Cases No : Unit of Measure : Description

09A1G10 1 DUCTCOIL 1-ROW H.W. 12X24
 09A2000 FIXTURES M & C
 09A3000 DISTRIBUTION SYSTEMS, M & C
 09B0000 VENTILATION SYSTEMS
 09B1000 EQUIPMENT, VENTILATION SYS.
 09B2000 FIXTURES, VENTILATION SYS.
 09B2100 1 FORCE DRAFT FANS
 09B2110 1 FORCE DRAFT FAN 10,000 CFM
 09B2120 1 TWO DRAFT FAN 10,000 CFM
 09B3000 DISTRIBUTION SYSTEMS, VENT. SYS.
 09C0000 EXHAUST SYSTEMS
 09C1000 EQUIPMENT, EXHAUST SYS.
 09C1100 1 EXHAUST FAN
 09C1110 1 EXHAUST FAN 200 CFM
 09C1120 1 EXHAUST FAN 1000 CFM
 09C1130 1 EXHAUST FAN 10000 CFM
 09C1140 1 EXHAUST FAN 25000 CFM
 09C1150 1 EXHAUST FAN 50000 CFM
 09C1160 1 EXHAUST FAN, 5000 CFM
 09C1200 1 AIR CURTAIN
 09C1210 1 AIR CURTAIN, 1000 CFM
 09C2000 FIXTURES, EXHAUST SYS.
 09C2100 3 METAL FLUE/CHIMNEY
 09C3000 DISTRIBUTION SYSTEMS, EXHAUST SYS.
 09D0000 SPECIAL SYSTEMS
 09D1000 CLEAN ROOMS
 09D2000 RF SHIELDING
 09D3000 PAINT SPRAY BOOTHS
 09D4000 SPECIAL AIR FILTRATION
 09D5000 HUMIDITY CONTROL SYSTEMS
 09D5100 1 ROOM HUMIDIFIER, FLOOR TYPE
 09D6000 OTHER
 09E0000 CONTROLS AND INSTRUMENTATION
 09E1000 DEVICES
 09E1100 1 THERMOSTATS/PNEUMATICS
 09E1110 1 THERMOSTAT/SENSOR
 09E1120 1 HUMIDITY SENSOR
 09E1130 1 FLOW SENSOR
 09E1140 1 RADIATION SENSOR
 09E1150 1 WIND VELOCITY SENSOR
 09E1160 1 PRESSURE SENSOR
 09E1200 DAMPER CONTROLLERS
 09E1210 1 DAMPER CONTROLLER - ELECTRICAL
 09E1300 1 SIMPLEX AIR COMPRESSORS
 09E1310 1 SIMPLEX AIR COMPRESSOR 1 HORSE POWER
 09E2000 TRANSMISSION MEDIA
 09F0000 TESTING, BALANCE, ETC.
 09F1000 TEST AND BALANCE
 09F2000 IDENTIFICATION SYSTEMS
 09F3000 O & M DATA

APPENDIX B:

GEOGRAPHICAL LOCATION ADJUSTMENT FACTORS

<u>State</u>	<u>Location</u>	<u>ACF Index</u>
Alabama	State Average	.86
	Birmingham	.96
	Mobile	.86
	Montgomery	.76
	Anniston Army Depot	.81
	Huntsville	.88
	Fort McClellan	.80
	Redstone Arsenal	.88
	Fort Rucker	.80
Alaska	State Average	2.25
	Anchorage	1.92
	Delta Junction	2.70
	Fairbanks	2.13
	Adak	3.88
	Aleutian Islands	3.86
	Anchorage NSGA	1.92
	Barrow	4.18
	Burnt Mtn.	6.86
	Clear	3.10
	Eielson AFB	2.13
	Elmendorf AFB	1.92
	Galena	3.73
	Fort Greely	2.70
	Fort Richardson	1.92
	Fort Wainwright	2.13
Arizona	State Average	1.02
	Flagstaff	1.02
	Phoenix	.99
	Tucson	1.05
	Fort Huachuca	1.22
	Yuma Proving Ground	1.31
	Yuma	1.31
Arkansas	State Average	.89
	Pinebluff	.93
	Little Rock	.83
	Fort Smith	.92
	Fort Chaffee	.92
	Pine Bluff Arsenal	.93
California	State Average	1.21
	Los Angeles	1.20
	San Diego	1.18
	San Francisco	1.25
	Beale	1.28
	Bridgeport NWTC	1.27
	Castle	1.13
	Centerville Beach	1.32
	Desert Area	1.18
	Edwards AFB	1.30

<u>State</u>	<u>Location</u>	<u>ACF Index</u>
California (Cont'd)	El Centro	1.27
	George AFB	1.31
	Fort Hunter Liggett	1.29
	Fort Irwin	1.20
	Le Moore NAS	1.20
	March AFB	1.18
	Mather AFB	1.17
	McClellan AFB	1.17
	Monterey Area	1.23
	Presidio of Monterey	1.23
	Norton AFB	1.16
	Oakland Army Base	1.33
	Fort Ord	1.24
	Port Huenema Area	1.20
	Riverside	1.18
	Sacramento	1.15
	Sacramento Army Depot	1.15
	Presidio of San Francisco	1.25
	San Nicholas Island	2.59
	Sharpe Army Depot	1.13
	Sierra Army Depot	1.33
	Stockton	1.15
	Travis AFB	1.27
	Vandenburg AFB	1.38
Colorado	State Average	.98
	Colorado Springs	.94
	Denver	1.04
	Pueblo	.96
	Fort Carson	1.01
	Fitzsimmons AMC	1.06
	Pueblo Army Depot	.96
	Peterson AFB	.94
	Rocky Mountain Arsenal	1.06
Connecticut	State Average	1.13
	Bridgeport	1.16
	Hartford	1.10
	New London	1.14
Delaware	State Average	.99
	Dover	1.04
	Lewes	.98
	Milford	.96
	Lewes NF	1.04
	Dover AFB	1.04
District of Columbia	Washington	1.03
	Fort McNair	1.03
	Walter Reed AMC	1.03
Florida	State Average	.89
	Miami	.95
	Panama City	.92
	Tampa	.79
	Cape Canaveral	.96
	Cape Kennedy	.96

<u>State</u>	<u>Location</u>	<u>ACF Index</u>
Florida (Cont'd)	Gulf Coast	.85
	Homestead AFB	.88
	Homestead	.88
	Jacksonville Area	.85
	Key West NAS	1.08
	Orlando	.80
	Pensacola Area	.85
	McDill AFB	.77
	Eglin AFB	.77
	Tyndall AFB	.92
	State Average	.80
	Albany	.82
	Atlanta	.87
	Macon	.70
	Athens	.90
	Atlanta-Marietta	.93
	Fort Benning	.71
Georgia	Columbus	.71
	Fort Gillem	.87
	Fort Gordon	.94
	Kings Bay	.93
	Fort McPherson	.87
	Fort Stewart	.84
	State Average	1.28
	Hawaii	1.29
	Honolulu	1.27
	Maui	1.29
	Alimanu	1.27
	Barbars Point NAS	1.34
	Fort Debussy	1.27
	EWA Beach Area	1.34
	Helemano	1.34
	Hickam Army Air Field	1.27
	Kaneohe MCAS	1.34
Hawaii	Moanalua	1.27
	Pearl City	1.27
	Pearl Harbor	1.27
	Pohakuloa	1.32
	Schofield Barracks	1.27
	Fort Shafter	1.27
	Tripler AMC	1.27
	Wheeler Army Air Field	1.34
	State Average	1.11
	Boise	1.05
	Idaho Falls	1.08
	Mountain Home	1.19
	Mountain Home AFB	1.20
	State Average	1.03
	Belleville	.96
	Chicago	1.09
Idaho	Rock Island	1.03
	Rock Island Arsenal	1.06
Illinois		

<u>State</u>	<u>Location</u>	<u>ACF Index</u>
Illinois (Cont'd)	St. Louis Support Ctr	.96
	Savannah Army Depot	1.05
	Scott AFB	1.03
	Fort Sheridan	1.10
Indiana	State Average	.99
	Indianapolis	1.03
	Logansport	.99
	Madison	.94
	Fort Benjamin Harrison	1.07
	Crane	1.10
	Crane AAP	1.10
	Grissom AFB	1.06
	Indiana AAP	1.02
Iowa	Jefferson Proving Ground	.94
	State Average	1.02
	Burlington	1.04
	Cedar Rapids	.98
	Des Moines	1.05
	Iowa AAP	1.06
	State Average	.94
Kansas	Manhattan	.97
	Topeka	.96
	Wichita	.88
	Kansas AAP	.94
	Fort Leavenworth	.94
	Fort Riley	.97
	Sunflower AAP	.97
	State Average	.96
	Bowling Green	.99
Kentucky	Lexington	.96
	Louisville	.93
	Fort Campbell	.93
	Fort Knox	.99
	Lexington/Bluegrass Army Depot	1.06
	Louisville NAS	.93
	State Average	.92
	Alexandria	.87
	New Orleans	.94
Louisiana	Shreveport	.94
	Barksdale AFB	.94
	England AFB	.87
	Gulf Outport New Orleans	.94
	Louisiana AAP	.94
	Fort Polk	.94
	State Average	.93
	Bangor	.85
	Caribou	.99
Maine	Portland	.94
	Brunswick	.93
	Cutler	.98
	Northern Area	1.17
	Winter Harbor	.98

<u>State</u>	<u>Location</u>	<u>ACF Index</u>
Maryland	State Average	.97
	Baltimore	.95
	Fredrick	.94
	Lexington Park	1.01
	Aberdeen Proving Ground	.94
	Annapolis	1.03
	Fort Detrick	.94
	Harry Diamond Lab	1.00
	Fort Meade	.95
	Patuxent River Area	1.08
	Fort Ritchie	.90
Massachusetts	State Average	1.10
	Boston	1.13
	Fitchburg	1.08
	Springfield	1.08
	Army Mtls & Mech Research Ctr	1.13
	Fort Devens	1.15
	Natick Research & Development Ctr	1.13
	South Weymouth	1.13
Michigan	State Average	1.06
	Bay City	1.02
	Detroit	1.14
	Marquette	1.03
	Detroit Arsenal	1.14
	Northern Area	1.25
	Republic (Elfcom)	1.10
	Selfridge AFB	1.14
Minnesota	State Average	1.08
	Duluth	1.05
	Minneapolis	1.09
	St. Cloud	1.10
	Twin Cities AAP	1.09
Mississippi	State Average	.84
	Biloxi	.87
	Columbus	.81
	Jackson	.84
	Columbus AFB	.81
	Gulfport Area	.87
	Meridian	.92
Missouri	State Average	.92
	Kansas City	.92
	St. Louis	.99
	Rolla	.85
	Lake City AAP	.93
	Fort Leonard Wood	.91
Montana	State Average	1.15
	Billings	1.15
	Butte	1.18
	Great Falls	1.12
	Malmstrom AFB	1.12
Nebraska	State Average	1.03
	Grand Island	1.00

<u>State</u>	<u>Location</u>	<u>ACF Index</u>
Nebraska (Cont'd)	Lincoln	1.05
	Omaha	1.05
	Offutt AFB	1.05
Nevada	State Average	1.18
	Hawthorne	1.26
	Las Vegas	1.13
	Reno	1.15
	Fallon	1.28
	Hawthorne AAP	1.26
	Nellis AFB	1.13
New Hampshire	State Average	1.09
	Concord	1.06
	Nashua	1.06
	Portsmouth	1.14
	Cold Regions Lab	1.17
New Jersey	State Average	1.08
	Newark	1.11
	Red Bank	1.08
	Trenton	1.06
	Bayonne	1.10
	Bayonne Mil Ocean Term	1.09
	Fort Dix	1.03
	Earle	1.10
	Lakehurst	1.05
	Fort Monmouth	1.09
	Picatinny Arsenal	1.20
New Mexico	State Average	1.03
	Alamogordo	.99
	Albuquerque	1.03
	Gallup	1.06
	Holloman AFB	1.05
	Kirtland AFB	1.03
	White Sands Missile Range	1.09
	Fort Wingate	1.06
New York	State Average	1.12
	Albany	1.07
	New York City	1.24
	Syracuse	1.05
	Brooklyn	1.24
	Fort Drum	1.18
	Fort Hamilton	1.24
	Seneca Army Depot	1.15
	U.S. Military Academy	1.17
	Watervliet Arsenal	1.07
North Carolina	State Average	.76
	Fayetteville	.76
	Greensboro	.75
	Wilmington	.78
	Fort Bragg	.76
	Camp Lejeune Area	.86
	Cherry Point	.86
	Goldsboro	.77

<u>State</u>	<u>Location</u>	<u>ACF Index</u>
North Carolina (Cont'd)	Pope AFB	.82
	Seymour AFB	.77
	Sunny Point Mil Ocean Term	.78
North Dakota	State Average	1.03
	Bismarck	1.02
	Grand Forks	.98
	Minot	1.10
	Grand Forks AFB	.98
	Stanley R. Hicklesen CPX	1.03
	Minot AFB	1.12
Ohio	State Average	1.00
	Columbus	1.03
	Dayton	.98
	Youngstown	.99
	Cleveland	1.14
	Wright-Patterson AFB	.98
Oklahoma	State Average	.93
	Lawton	.90
	McAlester	.91
	Oklahoma City	.98
	Altus AFB	.94
	Enid	1.01
	McAlester AAP	.91
	Fort Sill	.90
	State Average	1.05
Oregon	Pendleton	1.08
	Portland	1.07
	Salem	.99
	Charleston	1.11
	Coos Head	1.08
	Umatilla Army Depot	1.18
	State Average	1.00
	Harrisburg	.91
Pennsylvania	Philadelphia	1.05
	Pittsburgh	1.04
	Carlisle Barracks	.93
	New Cumberland Army Depot	.91
	Fort Indiantown Gap	1.07
	Letterkenny Army Depot	1.07
	Mechanicsburg Area	.91
	Tobyhanna Army Depot	1.14
	Warminster Area	1.04
	State Average	1.11
	Bristol	1.13
Rhode Island	Newport	1.11
	Providence	1.10
	Davisville	1.17
	State Average	.82
South Carolina	Charleston	.81
	Columbia	.82
	Myrtle Beach	.84
	Beaufort Area	.89
	State Average	.82

<u>State</u>	<u>Location</u>	<u>ACF Index</u>
South Carolina (Cont'd)	Charleston AFB	.81
	Fort Jackson	.82
	Sumter	.80
South Dakota	State Average	.95
	Aberdeen	.95
	Sioux Falls	.94
	Rapid City	.96
	Ellsworth AFB	.98
Tennessee	State Average	.84
	Chattanooga	.86
	Kingsport	.72
	Memphis	.95
	Arnold AFB	.90
	Milan AAP	.98
	Holston AAP	.71
Texas	State Average	.85
	San Angelo	.76
	San Antonio	.86
	Fort Worth	.93
	Fort Bliss	.96
	Carswell AFB	.93
	Chase Field - Beeville	.97
	Corpus Christi Army Depot	.92
	Corpus Christi	.92
	Dallas	.93
	Dyess AFB	.94
	Fort Hood	.89
	Kingsville	.99
	Red River Army Depot	.78
	Fort Sam Houston	.86
	William Beaumont AMC	.96
	Bergstrom AFB	.95
	Brooks AFB	.86
	Randolph AFB	.86
	Kelly AFB	.86
	Lackland AFB	.86
Utah	State Average	1.03
	Ogden	1.05
	Salt Lake City	1.00
	Tooele	1.06
	Dugway Proving Ground	1.03
	Hill AFB	1.07
	Tooele Army Depot	1.05
Vermont	State Average	.99
	Burlington	1.00
	Montpelier	1.00
	Rutland	.96
Virginia	State Average	.95
	Norfolk	.95
	Radford	.95
	Richmond	.94
	Arlington	1.04

<u>State</u>	<u>Location</u>	<u>ACF Index</u>
Virginia (Cont'd)	Arlington Hall Station	1.04
	Arlington National Cemetery	1.04
	Fort Belvoir	1.04
	Cameron Station	1.04
	Dahlgren	1.10
	Fort Eustis	.96
	Humphreys Engineer Center	1.03
	Fort A.P. Hill	.92
	Fort Lee	.93
	Fort Monroe	.94
	Fort Myer	1.03
	Norfolk-Newport News Area	.95
	Fort Pickett	.98
	Quantico	1.03
	Nadford AAP	1.02
	Port Story	.95
	Vint Hill Farms Station	1.08
Washington	State Average	1.09
	Spokane	1.08
	Tacoma	1.07
	Yakima	1.11
	Fairchild AFB	1.13
	Jim Creek	1.34
	Fort Lewis	1.07
	Pacific Beach	1.27
	Puget Sound Area	1.15
	Seattle Area	1.12
	Widbey Island	1.12
	Yakima Firing Center	1.18
	State Average	.95
	Bluefield	.92
West Virginia	Clarksburg	.95
	Charleston	.99
	Sugar Grove	1.15
	State Average	1.06
	LaCrosse	1.04
Wisconsin	Madison	1.02
	Milwaukee	1.13
	Badger AAP	1.06
	Clam Lake	1.20
	Fort McCoy	1.11
	State Average	1.08
	Casper	1.07
	Cheyenne	1.10
	Laramie	1.08
	F.F. Warren AFB	1.10
Wyoming		

APPENDIX C:
TASK DATA BASE DETAILED RESOURCE TABLES

TASK DATA FORM

Task Code: 0911101

Component: GAS METER

System: NATURAL GAS SYSTEM

Subsystem: EQUIPMENT

Task Description: REPLACE REPLACE METER

Unit of Measure: COUNT

Persons per Team: 1 Task Duration: 0.3900 hours

Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE METER	0.300000

Material Resources

Description	Quantity	Unit Cost
METER	1	93.0000
		93.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	10.000	16.000	20.000
2	10.000	16.000	20.000
3	10.000	16.000	20.000
4	10.000	16.000	20.000
5	10.000	16.000	20.000
6	10.000	16.000	20.000
7	10.000	16.000	20.000
8	10.000	16.000	20.000
9	10.000	16.000	20.000
10	10.000	16.000	20.000
11	10.000	16.000	20.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.300000	0.090000	0.390000
Material	Cost \$	93.000000		93.000000
Equipment	Hours			0.390000

Components In This Task: 0911100

TASK DATA FORM

Task Code: 0912101

Component: PIPE/FITTINGS, STEEL/IRON

System: NATURAL GAS SYSTEM

Subsystem: PIPING SYSTEM

Task Description: M/R INSTALL NEW GASKET

Unit of Measure: 1000 LINEAR FEET

Persons per Team: 1 Task Duration: 0.3250 hours

Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.DISCONNECT FLANGE JOINT	0.084000
2.REMOVE FLANGE GASKET	0.013000
3.MAKE NEW GASKET	0.035000
4.INSTALL NEW GASKET	0.013000
5.CONNECT FLANGE JOINTS	0.072000
6.CLEAN FLANGE FACES	0.033000

Material Resources

Description	Quantity	Unit Cost
GASKET	1	0.1600
		0.1600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	84.200	126.300	168.400
2	37.600	56.400	75.200
3	26.400	39.600	52.800
4	24.800	37.200	49.600
5	21.600	32.400	43.200
6	20.000	30.000	40.000
7	17.600	26.400	35.200
8	16.600	24.900	33.200
9	15.400	23.100	30.800
10	14.400	21.600	28.800
11	14.600	21.900	29.200

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.250000	0.075000	0.325000
Material	Cost \$	0.160000		0.160000
Equipment	Hours			0.325000

Components In This Task: 0912100

TASK DATA FORM

Task Code: 0912102

Component: PIPE/FITTINGS, STEEL/IRON System: NATURAL GAS SYSTEM Subsystem: PIPING SYSTEM
 Task Description: REPLACE REPLACE 10' SECTION
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 2 Task Duration: 5.3723 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.CHECK BREAK OR LEAK (1%)	0.012000
2.CUT WATER VALVE ON AND OFF	0.008000
3.REMOVE FIRST BROKEN SECTION	1.401000
4.REMOVE ADDITIONAL SECTIONS	0.605000
5.MATERIAL HANDLING	0.207000
6.CLEAN JOINTS	0.033000
7.INSTALL SECTION OF PIPE	1.579000
8.INSTALL LAST SECTION	4.413000
9.CHECK FOR LEAKS ADDITIONAL SECT	0.007000

Material Resources

Description	Quantity	Unit Cost
PIPE	10 FT.	1.8200
		18.2000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	42.100	50.520	63.150
2	18.800	22.560	28.200
3	13.200	15.840	19.800
4	12.400	14.880	18.600
5	10.800	12.960	16.200
6	10.000	12.000	15.000
7	8.800	10.560	13.200
8	8.300	9.960	12.450
9	7.700	9.240	11.550
10	7.200	8.640	10.800
11	7.300	8.760	10.950

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	8.265000	2.479500	10.744500
Material	Cost \$	18.200000		18.200000
Equipment	Hours			5.372250

Components In This Task: 0912100

TASK DATA FORM

Task Code: 0912103

Component: PIPE/FITTINGS, STEEL/IRON System: NATURAL GAS SYSTEM Subsystem: PIPING SYSTEM
 Task Description: REPLACE REPLACE PIPE AND FITTINGS
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 2 Task Duration: 537.2250 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.CHECK BREAK OR LEAK	1.200000
2.CUT WATER VALVE ON AND OFF	0.800000
3.REMOVE FIRST BROKEN SECTION	140.100000
4.REMOVE ADDITIONAL SECTIONS	60.500000
5.MATERIAL HANDLING	20.700000
6.CLEAN JOINTS	3.300000
7.INSTALL SECTION OF PIPE	157.900000
8.INSTALL LAST SECTION	441.300000
9.CHECK FOR LEAKS ADDTL SECTION	0.700000

Material Resources

Description	Quantity	Unit Cost
PIPE	1000 FT.	1.8200
		1820.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	210.500	315.750	378.900
2	94.000	141.000	169.200
3	66.000	99.000	118.800
4	62.000	93.000	111.600
5	54.000	81.000	97.200
6	50.000	75.000	90.000
7	44.000	66.000	79.200
8	41.500	62.250	74.700
9	38.500	57.750	69.300
10	36.000	54.000	64.800
11	36.500	54.750	65.700

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	826.500000	247.950000	1074.450000
Material	Cost \$	1820.000000		1820.000000
Equipment	Hours			537.225000

Components In This Task: 0912100

TASK DATA FORM

Task Code: 0912201

Component: PRESS. REDUCING VALVE .5" System: NATURAL GAS SYSTEM

Subsystem: PIPING SYSTEM

Task Description: PM CHECK GAS PRESSURE

Unit of Measure: COUNT

Persons per Team: 1 Task Duration: 0.1300 hours

Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.CHECK PRESSURE	0.100000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	5.000	5.000	5.000
2	5.000	5.000	5.000
3	5.000	5.000	5.000
4	5.000	5.000	5.000
5	5.000	5.000	5.000
6	5.000	5.000	5.000
7	5.000	5.000	5.000
8	5.000	5.000	5.000
9	5.000	5.000	5.000
10	5.000	5.000	5.000
11	5.000	5.000	5.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.100000	0.030000	0.130000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.130000

Components In This Task: 0912200

TASK DATA FORM

Task Code: 0912202

Component: PRESS. REDUCING VALVE .5" System: NATURAL GAS SYSTEM

Subsystem: PIPING SYSTEM

Task Description: REPLACE REPLACE PRESSURE REDUCING VALVE

Unit of Measure: COUNT

Persons per Team: 1 Task Duration: 0.2600 hours

Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REPLACE VALVE	0.200000

Material Resources

Description	Quantity	Unit Cost
VALVE	1	18.0000
		18.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	50.520	58.940	67.360
2	22.560	26.320	30.080
3	15.840	18.480	21.120
4	14.880	17.360	19.840
5	12.960	15.120	17.280
6	12.000	14.000	16.000
7	10.560	12.320	14.080
8	9.960	11.620	13.280
9	9.240	10.780	12.320
10	8.640	10.080	11.520
11	8.760	10.220	11.680

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.200000	0.060000	0.260000
Material Cost \$	18.000000		18.000000
Equipment Hours			0.260000

Components In This Task: 0912200

TASK DATA FORM

Task Code: 0912301

Component: PRESS. REDUCING VALVE, 2" System: NATURAL GAS SYSTEM Subsystem: PIPING SYSTEM
 Task Description: PM CHECK GAS PRESSURE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.1300 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.CHECK PRESSURE	0.100000			0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	5.000	5.000	5.000
2	5.000	5.000	5.000
3	5.000	5.000	5.000
4	5.000	5.000	5.000
5	5.000	5.000	5.000
6	5.000	5.000	5.000
7	5.000	5.000	5.000
8	5.000	5.000	5.000
9	5.000	5.000	5.000
10	5.000	5.000	5.000
11	5.000	5.000	5.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.100000	0.030000	0.130000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			0.130000

Components In This Task: 0912210

TASK DATA FORM

Task Code: 0912302

Component: PRESS. REDUCING VALVE, 2" System: NATURAL GAS SYSTEM Subsystem: PIPING SYSTEM
 Task Description: REPLACE REPLACE PRESSURE REDUCING VALVE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.3120 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE VALVE	0.480000	VALVE	1	305.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	50.520	58.940	67.360
2	22.560	26.320	30.080
3	15.840	18.480	21.120
4	14.880	17.360	19.840
5	12.960	15.120	17.280
6	12.000	14.000	16.000
7	10.560	12.320	14.080
8	9.960	11.620	13.280
9	9.240	10.780	12.320
10	8.640	10.080	11.520
11	8.760	10.220	11.680

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.480000	0.144000	0.624000
Material	Cost \$	305.000000		305.000000
Equipment	Hours			0.312000

Components In This Task: 0912210

TASK DATA FORM

Task Code: 0921101

Component: OIL STORAGE TANK, 275 GAL. System: FUEL OIL SYSTEM Subsystem: STORAGE SYSTEMS
 Task Description: REPLACE REPLACE TANK
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 1.3000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE TANK	2.000000	TANK	1	155.0000
				155.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	84.200	126.300	168.400
2	37.600	56.400	75.200
3	26.400	39.600	52.800
4	24.800	37.200	49.600
5	21.600	32.400	43.200
6	20.000	30.000	40.000
7	17.600	26.400	35.200
8	16.600	24.900	33.200
9	15.400	23.100	30.800
10	14.400	21.600	28.800
11	14.600	21.900	29.200

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	2.000000	0.600000	2.600000
Material	Cost \$	155.000000		155.000000
Equipment	Hours			1.300000

Components In This Task: 0921100

TASK DATA FORM

Task Code: 0921201

Component: OIL FILTER System: FUEL OIL SYSTEM Subsystem: STORAGE SYSTEMS
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.1040 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE FILTER ELEMENT	0.080000	FILTR ELEMENT	1	3.2000
				3.2000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.080000	0.024000	0.104000
Material	Cost \$	3.200000		3.200000
Equipment	Hours			0.104000

Components In This Task: 0921200

TASK DATA FORM

Task Code: 0921202

Component: OIL FILTER System: FUEL OIL SYSTEM Subsystem: STORAGE SYSTEMS
 Task Description: REPLACE REPLACE FILTER
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE FILTER	0.500000	FILTER	1	10.0000
				10.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	20.000	30.000	40.000
2	20.000	30.000	40.000
3	20.000	30.000	40.000
4	20.000	30.000	40.000
5	20.000	30.000	40.000
6	20.000	30.000	40.000
7	20.000	30.000	40.000
8	20.000	30.000	40.000
9	20.000	30.000	40.000
10	20.000	30.000	40.000
11	20.000	30.000	40.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.500000	0.150000	0.650000
Material	Cost \$	10.000000		10.000000
Equipment	Hours			0.650000

Components In This Task: 0921200

TASK DATA FORM

Task Code: 0921301

Component: FUEL LEVEL METER System: FUEL OIL SYSTEM Subsystem: STORAGE SYSTEMS
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.2210 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.CHECK CALIBRATION	0.170000			0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.000	5.000	6.000
2	4.000	5.000	6.000
3	4.000	5.000	6.000
4	4.000	5.000	6.000
5	4.000	5.000	6.000
6	4.000	5.000	6.000
7	4.000	5.000	6.000
8	4.000	5.000	6.000
9	4.000	5.000	6.000
10	4.000	5.000	6.000
11	4.000	5.000	6.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.170000	0.051000	0.221000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			0.221000

Components In This Task: 0921300

TASK DATA FORM

Task Code: 0921302

Component: FUEL LEVEL METER System: FUEL OIL SYSTEM Subsystem: STORAGE SYSTEMS
 Task Description: REPLACE REPLACE GAUGE
 Unit of Measure: COUNTY
 Persons per Team: 1 Task Duration: 1.3000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE REMOTE READ GAUGE	1.000000

Material Resources

Description	Quantity	Unit Cost
GAUGE	1	585.0000
		585.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	10.000	20.000	30.000
2	10.000	20.000	30.000
3	10.000	20.000	30.000
4	10.000	20.000	30.000
5	10.000	20.000	30.000
6	10.000	20.000	30.000
7	10.000	20.000	30.000
8	10.000	20.000	30.000
9	10.000	20.000	30.000
10	10.000	20.000	30.000
11	10.000	20.000	30.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	1.000000	0.300000	1.300000
Material	Cost \$	585.000000		585.000000
Equipment	Hours			1.300000

Components In This Task: 0921300

TASK DATA FORM

Task Code: 0923101

Component: PIPE/FITTINGS, COPPER System: FUEL OIL SYSTEM Subsystem: DISTRIBUTION SYSTEM
 Task Description: M/R RESOLDER JOINT
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 1 Task Duration: 0.1846 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.MEASURE CUT & REAM BOTH ENDS	0.041000
2.SOLDER FITTING	0.101000

Material Resources

Description	Quantity	Unit Cost
SOLDER	.5 OZ.	0.1600
		0.0800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	33.680	42.100	50.520
2	15.040	18.800	22.560
3	10.560	13.200	15.840
4	9.920	12.400	14.880
5	8.640	10.800	12.960
6	8.000	10.000	12.000
7	7.040	8.800	10.560
8	6.640	8.300	9.960
9	6.160	7.700	9.240
10	5.760	7.200	8.640
11	5.840	7.300	8.760

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.142000	0.042600	0.184600
Material	Cost \$	0.080000		0.080000
Equipment	Hours			0.184600

Components In This Task: 0923100

TASK DATA FORM

Task Code: 0923102

Component: PIPE/FITTINGS, COPPER System: FUEL OIL SYSTEM Subsystem: DISTRIBUTION SYSTEM
 Task Description: REPLACE INSTALL 10' SECTION
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 2 Task Duration: 2.7755 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE 10' SECTION INSTALL NEW	4.270000	PIPE	10 FT.	1.0500
				10.5000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	42.100	84.200	126.300
2	18.800	37.600	56.400
3	13.200	26.400	39.600
4	12.400	24.800	37.200
5	10.800	21.600	32.400
6	10.000	20.000	30.000
7	8.800	17.600	26.400
8	8.300	16.600	24.900
9	7.700	15.400	23.100
10	7.200	14.400	21.600
11	7.300	14.600	21.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.270000	1.281000	5.551000
Material Cost \$	10.500000		10.500000
Equipment Hours			2.775500

Components In This Task: 0923100

TASK DATA FORM

Task Code: 0923103

Component: PIPE/FITTINGS, COPPER System: FUEL OIL SYSTEM Subsystem: DISTRIBUTION SYSTEM
 Task Description: REPLACE REPLACE PIPE AND FITTINGS
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 2 Task Duration: 27.7550 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE OLD, INSTALL NEW	42.700000	PIPE	1000 FT.	1.0500
				1050.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	63.150	105.250	210.500
2	28.200	47.000	94.000
3	19.800	33.000	66.000
4	18.600	31.000	62.000
5	16.200	27.000	54.000
6	15.000	25.000	50.000
7	13.200	22.000	44.000
8	12.450	20.750	41.500
9	11.550	19.250	38.500
10	10.800	18.000	36.000
11	10.950	18.250	36.500

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	42.700000	12.810000	55.510000
Material Cost \$	1050.000000		1050.000000
Equipment Hours			27.755000

Components In This Task: 0923100

TASK DATA FORM

Task Code: 0931101

Component: LPG STORAGE TANK, 1000 GAL System: LPG SYSTEM Subsystem: STORAGE SYSTEM
 Task Description: REPLACE REPLACE TANK
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.6000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE TANK	4.000000	TANK	1	1485.0000
				1485.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	84.200	126.300	168.400
2	37.600	56.400	75.200
3	26.400	39.600	52.800
4	24.800	37.200	49.600
5	21.600	32.400	43.200
6	20.000	30.000	40.000
7	17.600	26.400	35.200
8	16.600	24.900	33.200
9	15.400	23.100	30.800
10	14.400	21.600	28.800
11	14.600	21.900	29.200

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.000000	1.200000	5.200000
Material Cost \$	1485.000000		1485.000000
Equipment Hours			2.600000

Components In This Task: 0931100

TASK DATA FORM

Task Code: 0933101

Component: PIPE/FITNGS,STEEL/IRON System: LPG SYSTEM Subsystem: DISTRIBUTION SYSTEM
 Task Description: M/R INSTALL NEW GASKET
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 1 Task Duration: 0.3250 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.DISCONNECT FLANGE JOINT	0.084000	GASKET	1	0.1600
2.REMOVE FLANGE GASKET	0.013000			0.1600
3.MAKE NEW GASKET	0.035000			
4.INSTALL NEW GASKET	0.013000			
5.CONNECT FLANGE JOINTS	0.072000			
6.CLEAN FLANGE FACES	0.033000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	155.770	210.500	265.230
2	69.560	94.000	118.440
3	48.840	66.000	83.160
4	45.880	62.000	78.120
5	39.960	54.000	68.040
6	37.000	50.000	63.000
7	32.560	44.000	55.440
8	30.710	41.500	52.290
9	28.490	38.500	48.510
10	26.640	36.000	45.360
11	27.010	36.500	45.990

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.250000	0.075000	0.325000
Material Cost \$	0.160000		0.160000
Equipment Hours			0.325000

Components In This Task: 0933100

TASK DATA FORM

Task Code: 0933102

Component: PIPE/FITNGS,STEEL/IRON System: LPG SYSTEM Subsystem: DISTRIBUTION SYSTEM
 Task Description: REPLACE REPLACE 10' SECTION
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 2 Task Duration: 5.3723 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.CHECK BREAK OR LEAK (1X)	0.012000
2.CUT WATER VALVE ON AND OFF	0.008000
3.REMOVE FIRST BROKEN SECTION	1.401000
4.REMOVE ADDITIONAL SECTIONS	0.605000
5.MATERIAL HANDLING	0.207000
6.CLEAN JOINTS	0.033000
7.INSTALL SECTION OF PIPE	1.579000
8.INSTALL LAST SECTION	4.413000
9.CHECK FOR LEAKS ADDITIONAL SECT	0.007000

Material Resources

Description	Quantity	Unit Cost
PIPE	10 FT.	1.8200
		18.2000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	42.100	50.520	63.150
2	18.800	22.560	28.200
3	13.200	15.840	19.800
4	12.400	14.880	18.600
5	10.800	12.960	16.200
6	10.000	12.000	15.000
7	8.800	10.560	13.200
8	8.300	9.960	12.450
9	7.700	9.240	11.550
10	7.200	8.640	10.800
11	7.300	8.760	10.950

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	8.265000	2.479500	10.744500
Material Cost \$	18.200000		18.200000
Equipment Hours			5.372250

Components In This Task: 0933100

TASK DATA FORM

Task Code: 0933103

Component: PIPE/FITNGS,STEEL/IRON System: LPG SYSTEM Subsystem: DISTRIBUTION SYSTEM
 Task Description: REPLACE REPLACE PIPE AND FITTINGS
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 2 Task Duration: 537.2250 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.CHECK BREAK OR LEAK	1.200000
2.CUT WATER VALVE ON AND OFF	0.800000
3.REMOVE FIRST BROKEN SECTION	140.100000
4.REMOVE ADDITIONAL SECTIONS	60.500000
5.MATERIAL HANDLING	20.700000
6.CLEAN JOINTS	3.300000
7.INSTALL SECTION OF PIPE	157.900000
8.INSTALL LAST SECTION	441.300000
9.CHECK FOR LEAKS ADDITIONAL SECT	0.700000

Material Resources

Description	Quantity	Unit Cost
PIPE	1000 FT.	1.8200
		1820.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	210.500	315.750	378.900
2	94.000	141.000	169.200
3	66.000	99.000	118.800
4	62.000	93.000	111.600
5	54.000	81.000	97.200
6	50.000	75.000	90.000
7	44.000	66.000	79.200
8	41.500	62.250	74.700
9	38.500	57.750	69.300
10	36.000	54.000	64.800
11	36.500	54.750	65.700

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	826.500000	247.950000	1074.450000
Material Cost \$	1820.000000		1820.000000
Equipment Hours			537.225000

Components In This Task: 0933100

TASK DATA FORM

Task Code: 0941101

Component: STEAM CONVERTOR, <300,000 System: STEAM, CENTRAL Subsystem: PRESS.RED./REG. SYSTEM
 Task Description: M/R REPAIR STEAM CONVERTOR
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 5.9410 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REPAIR HEAT EXCHANGER	4.570000

Material Resources

Description	Quantity	Unit Cost
WELD ROD	4 OZ	1.3900
		5.5600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	11.310	18.850	37.700
2	4.860	8.100	16.200
3	3.600	6.000	12.000
4	3.330	5.550	11.100
5	2.820	4.700	9.400
6	3.000	5.000	10.000
7	2.310	3.850	7.700
8	2.310	3.850	7.700
9	2.040	3.400	6.800
10	1.800	3.000	6.000
11	1.800	3.000	6.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.570000	1.371000	5.941000
Material Cost \$	5.560000		5.560000
Equipment Hours			5.941000

Components In This Task: 0981J10

TASK DATA FORM

Task Code: 0941102

Component: STEAM CONVERTOR, <300,000 System: STEAM, CENTRAL Subsystem: PRESS.RED./REG. SYSTEM
 Task Description: PM INSPECT FOR LEAKS
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.0923 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.CHECK RELIEF VALVE OPERATION	0.029000
2.CHECK FOR PROPER WATER TEMP.	0.042000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	7.540	7.540	7.540
2	3.240	3.240	3.240
3	2.400	2.400	2.400
4	2.220	2.220	2.220
5	1.880	1.880	1.880
6	2.000	2.000	2.000
7	1.540	1.540	1.540
8	1.540	1.540	1.540
9	1.360	1.360	1.360
10	1.200	1.200	1.200
11	1.200	1.200	1.200

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.071000	0.021300	0.092300
Material Cost \$	0.000000		0.000000
Equipment Hours			0.092300

Components In This Task: 0981J10

TASK DATA FORM

Task Code: 0941103

Component: STEAM CONVERTOR, <300.000 System: STEAM, CENTRAL Subsystem: PRESS.RED./REG. SYSTEM
 Task Description: REPLACE REPLACE STEAM CONVERTOR
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 3.6790 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE EXCHANGER, INSTALL NEW	5.660000	CONVERTOR	1	785.0000
				785.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	113.100	150.800
2	16.200	48.600	64.800
3	12.000	36.000	48.000
4	11.100	33.300	44.400
5	9.400	28.200	37.600
6	10.000	30.000	40.000
7	7.700	23.100	30.800
8	7.700	23.100	30.800
9	6.800	20.400	27.200
10	6.000	18.000	24.000
11	6.000	18.000	24.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	5.660000	1.698000	7.358000
Material	Cost \$	785.000000		785.000000
Equipment	Hours			3.679000

Components In This Task: 0981J10

TASK DATA FORM

Task Code: 0941201

Component: FLASH TANK, 24 GAL. System: STEAM, CENTRAL Subsystem: PRESS.RED./REG. SYSTEM
 Task Description: M/R REPAIR FLASH TANK
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 5.9410 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPAIR FLASH TANK	4.570000	WELD ROD	4.02	1.3900
				5.5600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	11.310	18.850	37.700
2	4.860	8.100	16.200
3	3.600	6.000	12.000
4	3.330	5.550	11.100
5	2.820	4.700	9.400
6	3.000	5.000	10.000
7	2.310	3.850	7.700
8	2.310	3.850	7.700
9	2.040	3.400	6.800
10	1.800	3.000	6.000
11	1.800	3.000	6.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	4.570000	1.371000	5.941000
Material	Cost \$	5.560000		5.560000
Equipment	Hours			5.941000

Components In This Task: 0981K10

TASK DATA FORM

Task Code: 0941202

Component: FLASH TANK, 24 GAL. System: STEAM, CENTRAL Subsystem: PRESS.RED./REG. SYSTEM
 Task Description: PM PREVENTIVE MAINTENANCE ON FLASH TANK
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.0390 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.CHECK FOR LEAKS	0.030000			0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.030000	0.009000	0.039000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.039000

Components In This Task: 0981K10

TASK DATA FORM

Task Code: 0941203

Component: FLASH TANK, 24 GAL. System: STEAM, CENTRAL Subsystem: PRESS.RED./REG. SYSTEM
 Task Description: REPLACE REPLACE FLASH TANK
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 3.2500 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE OLD AND INSTALL NEW TANK	5.000000	FLASH TANK	1	139.0000
				139.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.350	56.550	75.400
2	8.100	24.300	32.400
3	6.000	18.000	24.000
4	5.550	16.650	22.200
5	4.700	14.100	18.800
6	5.000	15.000	20.000
7	3.850	11.550	15.400
8	3.650	11.550	15.400
9	3.400	10.200	13.600
10	3.000	9.000	12.000
11	3.000	9.000	12.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	5.000000	1.500000	6.500000
Material Cost \$	139.000000		139.000000
Equipment Hours			3.250000

Components In This Task: 0981K10

TASK DATA FORM

Task Code: 0941301

Component: STEAM REG. VALVE 2" System: STEAM, CENTRAL Subsystem: PRESS.RED./REG. SYSTEM
 Task Description: REPLACE REPLACE STEAM VALVE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 3.9000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE STEAM VALVE	6.000000	STEAM VALVE	1 UNIT	236.3500
				236.3500

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	7.540	22.620	37.700
2	3.240	9.720	16.200
3	2.400	7.200	12.000
4	2.220	6.660	11.100
5	1.880	5.640	9.400
6	2.000	6.000	10.000
7	1.540	4.620	7.700
8	1.540	4.620	7.700
9	1.360	4.080	6.800
10	1.200	3.600	6.000
11	1.200	3.600	6.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	6.000000	1.800000	7.800000
Material Cost \$	236.350000		236.350000
Equipment Hours			3.900000

Components In This Task: _____

TASK DATA FORM

Task Code: 0941501

Component: COND. METER <300 #/HR. System: STEAM, CENTRAL Subsystem: PRESS.RED./REG. SYSTEM
 Task Description: M/R REPAIR METER
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.9500 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE DRUM	0.500000	DRUM	1	508.0000
2.REPLACE BEARINGS	1.000000	BEARINGS	2	41.7500
				591.5000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	21.050	63.150	84.200
2	9.400	28.200	37.600
3	6.600	19.800	26.400
4	6.200	18.600	24.800
5	5.400	16.200	21.600
6	5.000	15.000	20.000
7	4.400	13.200	17.600
8	4.150	12.450	16.600
9	3.850	11.550	15.400
10	3.600	10.800	14.400
11	3.650	10.950	14.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.500000	0.450000	1.950000
Material Cost \$	591.500000		591.500000
Equipment Hours			1.950000

Components In This Task: 0941500

TASK DATA FORM

Task Code: 0941502

Component: COND. METER, <300 #/HR. System: STEAM, CENTRAL Subsystem: PRESS.RED./REG. SYSTEM
 Task Description: PM PREVENTIVE MAINTENANCE CLEANING
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.3000 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE SCALE/DEPOSITS	1.000000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	2.000	2.000	2.000
2	2.000	2.000	2.000
3	2.000	2.000	2.000
4	2.000	2.000	2.000
5	2.000	2.000	2.000
6	2.000	2.000	2.000
7	2.000	2.000	2.000
8	2.000	2.000	2.000
9	2.000	2.000	2.000
10	2.000	2.000	2.000
11	2.000	2.000	2.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.000000	0.300000	1.300000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.300000

Components In This Task: 0941500

TASK DATA FORM

Task Code: 0941503

Component: COND. METER, <300 #/HR. System: STEAM, CENTRAL Subsystem: PRESS.RED./REG. SYSTEM
 Task Description: REPLACE REPLACE METER
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE METER	0.500000

Material Resources

Description	Quantity	Unit Cost
METER	1	950.0000
		950.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	84.200	126.500	168.400
2	37.600	56.400	75.200
3	26.400	39.600	52.800
4	24.800	37.200	49.600
5	21.600	32.400	43.200
6	20.000	30.000	40.000
7	17.600	26.400	35.200
8	16.600	24.900	33.200
9	15.400	23.100	30.800
10	14.400	21.600	28.800
11	14.600	21.900	29.200

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	950.000000		950.000000
Equipment Hours			0.650000

Components In This Task: 0941500

TASK DATA FORM

Task Code: 0942101

Component: RADIATOR VALVE 1" System: STEAM, CENTRAL Subsystem: VALVES
 Task Description: REPLACE REPLACE RADIATOR VALVE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7150 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE RADIATOR VALVE	1.100000	VALVE	1 UNIT	19.0800
				19.0800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	113.100	188.500	263.900
2	48.600	81.000	113.400
3	36.000	60.000	84.000
4	33.300	55.500	77.700
5	28.200	47.000	65.800
6	30.000	50.000	70.000
7	23.100	38.500	53.900
8	23.100	38.500	53.900
9	20.400	34.000	47.600
10	18.000	30.000	42.000
11	18.000	30.000	42.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	1.100000	0.330000	1.430000
Material	Cost \$	19.080000		19.080000
Equipment	Hours			0.715000

Components In This Task:

TASK DATA FORM

Task Code: 0943101

Component: CAST IRON RADIATOR 10 SECT System: STEAM, CENTRAL Subsystem: EQUIPMENT
 Task Description: M/R REPLACE RADIATOR
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.6000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE RADIATOR	4.000000	RADIATOR	1 UNIT	166.0000
				166.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	113.100	188.500	263.900
2	48.600	81.000	113.400
3	36.000	60.000	84.000
4	33.300	55.500	77.700
5	28.200	47.000	65.800
6	30.000	50.000	70.000
7	23.100	38.500	53.900
8	23.100	38.500	53.900
9	20.400	34.000	47.600
10	18.000	30.000	42.000
11	18.000	30.000	42.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	4.000000	1.200000	5.200000
Material	Cost \$	166.000000		166.000000
Equipment	Hours			2.600000

Components In This Task: 0981F00 0943101

TASK DATA FORM

Task Code: 0943201

Component: BASEBOARD RADIATION 10 FT System: STEAM, CENTRAL Subsystem: EQUIPMENT
 Task Description: H/R REPLACE RADIATOR
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.6000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE RADIATOR	4.000000	BSBD. RADTR.	1 UNIT	219.0000
				219.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	75.400	113.100
2	16.200	32.400	48.600
3	12.000	24.000	36.000
4	11.100	22.200	33.300
5	9.400	18.800	28.200
6	10.000	20.000	30.000
7	7.700	15.400	23.100
8	7.700	15.400	23.100
9	6.800	13.600	20.400
10	6.000	12.000	18.000
11	6.000	12.000	18.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.000000	1.200000	5.200000
Material Cost \$	219.000000		219.000000
Equipment Hours			2.600000

Components In This Task: 0981G00

TASK DATA FORM

Task Code: 0943301

Component: FINNED RADIATOR, WALL 10 F System: STEAM, CENTRAL Subsystem: EQUIPMENT
 Task Description: H/R REPLACE FIN. RADIATOR
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.6000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE RADIATOR	4.000000	FIN. RADTR	1 UNIT	247.5000
				247.5000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	75.400	113.100
2	16.200	32.400	48.600
3	12.000	24.000	36.000
4	11.100	22.200	33.300
5	9.400	18.800	28.200
6	10.000	20.000	30.000
7	7.700	15.400	23.100
8	7.700	15.400	23.100
9	6.800	13.600	20.400
10	6.000	12.000	18.000
11	6.000	12.000	18.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.000000	1.200000	5.200000
Material Cost \$	247.500000		247.500000
Equipment Hours			2.600000

Components In This Task: 0981H01

TASK DATA FORM

Task Code: 0961101

Component: SOLAR PANEL, 3' X 8' System: SOLAR Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE SOLAR PANEL
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 1.9500 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE PANEL	3.000000

Material Resources

Description	Quantity	Unit Cost
PANEL	1	330.0000
		330.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	42.100	63.150	84.200
2	18.800	28.200	37.600
3	13.200	19.800	26.400
4	12.400	18.600	24.800
5	10.800	16.200	21.600
6	10.000	15.000	20.000
7	8.800	13.200	17.600
8	8.300	12.450	16.600
9	7.700	11.550	15.400
10	7.200	10.800	14.400
11	7.300	10.950	14.600

SUMMARY

Resources	UCM	Direct	Indirect	Total
Labor	Hours	3.000000	0.900000	3.900000
Material	Cost \$	330.000000		330.000000
Equipment	Hours			1.950000

Components In This Task: 0961100

TASK DATA FORM

Task Code: 0961201

Component: SOLAR STORAGE TANK, 1000GAL System: SOLAR Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE TANK
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 7.8000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE TANK	12.000000

Material Resources

Description	Quantity	Unit Cost
TANK	1	2070.0000
		2070.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	63.150	84.200	126.300
2	28.200	37.600	56.400
3	19.800	26.400	39.600
4	18.600	24.800	37.200
5	16.200	21.600	32.400
6	15.000	20.000	30.000
7	13.200	17.600	26.400
8	12.450	16.600	24.900
9	11.550	15.400	23.100
10	10.800	14.400	21.600
11	10.950	14.600	21.900

SUMMARY

Resources	UCM	Direct	Indirect	Total
Labor	Hours	12.000000	3.600000	15.600000
Material	Cost \$	2070.000000		2070.000000
Equipment	Hours			7.800000

Components In This Task: 0961200

TASK DATA FORM

Task Code: 0962101

Component: PIPE/FITTINGS, PVC System: SOLAR Subsystem: PIPING SYSTEM
 Task Description: M/R REGUE JOINT
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 1 Task Duration: 0.2870 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1. CUT EXIST PIPE, INSTL TEE, 1 JNT	0.029440	GLUE	.5 OZ	0.0500
2. CONNECT REMAIN 2 JOINTS OF TEE	0.030800			0.0250
3. MOVE TOOLS AND MATERIALS	0.034530			
4. INSPECT JOINTS	0.126000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	7.040	8.800	10.560
2	6.720	8.400	10.080
3	7.120	8.900	10.680
4	7.600	9.500	11.400
5	7.760	9.700	11.640
6	8.000	10.000	12.000
7	8.720	10.900	13.080
8	9.040	11.300	13.560
9	9.600	12.000	14.400
10	10.240	12.800	15.360
11	14.000	17.500	21.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.220770	0.066231	0.287001
Material Cost \$	0.025000		0.025000
Equipment Hours			0.287001

Components In This Task: 0962100

TASK DATA FORM

Task Code: 0962102

Component: PIPE/FITTINGS, PVC System: SOLAR Subsystem: PIPING SYSTEM
 Task Description: M/R INSTALL 10' SECTION
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 2 Task Duration: 0.2085 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1. REMV BROKEN PIPE, INSTALL NEW	0.202280	PIPE	10 FT	0.6300
2. MOVE TOOLS AND MATERIALS	0.034530	GLUE	1 OZ	0.0500
3. INSPECT JOINTS	0.084000			6.3500

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	13.200	17.600	22.000
2	12.600	16.800	21.000
3	13.350	17.800	22.250
4	14.250	19.000	23.750
5	14.550	19.400	24.250
6	15.000	20.000	25.000
7	16.350	21.800	27.250
8	16.950	22.600	28.250
9	18.000	24.000	30.000
10	19.200	25.600	32.000
11	26.250	35.000	43.750

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.320310	0.096243	0.417053
Material Cost \$	6.350000		6.350000
Equipment Hours			0.208527

Components In This Task: 0962100

TASK DATA FORM

Task Code: 0962103

Component: PIPE/FITTINGS, PVC System: SOLAR Subsystem: PIPING SYSTEM
 Task Description: REPLACE REPLACE PIPE
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 2 Task Duration: 20.8527 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMV BROKEN PIPE, INSTALL NEW	20.228000
2.MOVE TOOLS AND MATERIALS	3.453000
3.INSPECT JOINTS	8.400000

Material Resources

Description	Quantity	Unit Cost
PIPE	1000 FT	0.6300
GLUE	25 OZ	0.0500
		631.2500

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	22.000	26.400	30.800
2	21.000	25.200	29.400
3	22.250	26.700	31.150
4	23.750	28.500	33.250
5	24.250	29.100	33.950
6	25.000	30.000	35.000
7	27.250	32.700	38.150
8	28.250	33.900	39.550
9	30.000	36.000	42.000
10	32.000	38.400	44.800
11	43.750	52.500	61.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	32.081000	9.624300	41.705300
Material Cost \$	631.250000		631.250000
Equipment Hours			20.852650

Components In This Task: 0962100

TASK DATA FORM

Task Code: 0981111

Component: BOILER GAS 250 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR BOILER
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 6.1100 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE BURNER BLOWER	0.400000
2.REM./REPL.BURN.BLOWER BEARING	0.800000
3.REM./REPL.BURNER BLOWER MOTOR	0.800000
4.REMOVE/REPLACE BURNER FIREYE	0.600000
5.REM./REPL.BURN.GAS REGULATOR	0.400000
6.REM./REPL.BURN AUTO GAS VALVE	0.400000
7.REM./REPL.BURNER SOLENOID VALVE	0.400000
8.REM./REPL./BURN.BUTTFLY.VALVE-3	0.400000
9.REPAIR CONTROLS	0.500000

Material Resources

Description	Quantity	Unit Cost
MOTOR	1	93.8900
FIREYE	1	16.6700
GAS REGULAT.	1	17.9700
SOLENOID	1	165.0000
BUTTERFLY	1	7.5000
		301.0300

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	26.390	33.930
2	8.100	11.340	14.580
3	6.000	8.400	10.800
4	5.550	7.770	9.990
5	4.700	6.580	8.460
6	5.000	7.000	9.000
7	3.850	5.390	6.930
8	3.850	5.390	6.930
9	3.400	4.760	6.120
10	3.000	4.200	5.400
11	3.000	4.200	5.400

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.700000	1.410000	6.110000
Material Cost \$	301.030000		301.030000
Equipment Hours			6.110000

Components In This Task: 0981110

TASK DATA FORM

Task Code: 0981112

Component: BOILER GAS 250 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.4300 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.ANNUAL MAINTENANCE INSPECTION	1.100000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.100000	0.330000	1.430000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.430000

Components In This Task: 0981110

TASK DATA FORM

Task Code: 0981113

Component: BOILER GAS 250 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.3900 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.EXTERNAL INSPECTION	0.300000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.250	0.250	0.250
2	0.250	0.250	0.250
3	0.250	0.250	0.250
4	0.250	0.250	0.250
5	0.250	0.250	0.250
6	0.250	0.250	0.250
7	0.250	0.250	0.250
8	0.250	0.250	0.250
9	0.250	0.250	0.250
10	0.250	0.250	0.250
11	0.250	0.250	0.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.300000	0.090000	0.390000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.390000

Components In This Task: 0981110

TASK DATA FORM

Task Code: 0981114

Component: BOILER GAS 250 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.4300 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.CLEAN FIRE BOX	1.100000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	2.000	2.000	2.000
2	2.000	2.000	2.000
3	2.000	2.000	2.000
4	2.000	2.000	2.000
5	2.000	2.000	2.000
6	2.000	2.000	2.000
7	2.000	2.000	2.000
8	2.000	2.000	2.000
9	2.000	2.000	2.000
10	2.000	2.000	2.000
11	2.000	2.000	2.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	1.100000	0.330000	1.430000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			1.430000

Components In This Task: 0981110

TASK DATA FORM

Task Code: 0981115

Component: BOILER GAS 250 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.WEEKLY TOUR	0.200000
2.ANALYZE WATER SAMPLES	0.300000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.019	0.019	0.019
2	0.019	0.019	0.019
3	0.019	0.019	0.019
4	0.019	0.019	0.019
5	0.019	0.019	0.019
6	0.019	0.019	0.019
7	0.019	0.019	0.019
8	0.019	0.019	0.019
9	0.019	0.019	0.019
10	0.019	0.019	0.019
11	0.019	0.019	0.019

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.500000	0.150000	0.650000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			0.650000

Components In This Task: 0981115

TASK DATA FORM

Task Code: 0981116

Component: BOILER GAS 250 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE BOILER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 32.5000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE BOILER	50.000000	BOILER PKG.	1	2990.0000
				2990.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	94.250	113.100	131.950
2	40.500	48.600	56.700
3	30.000	36.000	42.000
4	27.750	33.300	38.850
5	23.500	28.200	32.900
6	25.000	30.000	35.000
7	19.250	23.100	26.950
8	19.250	23.100	26.950
9	17.000	20.400	23.800
10	15.000	18.000	21.000
11	15.000	18.000	21.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	50.000000	15.000000	65.000000
Material Cost \$	2990.000000		2990.000000
Equipment Hours			32.500000

Components In This Task: 0981110

TASK DATA FORM

Task Code: 0981121

Component: BOILER GAS 2000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR BOILER
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 6.1100 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE BURNER BLOWER	0.400000	MOTOR	1	83.8500
2.REM./REPL.BURNER BLOWER BEARING	0.800000	FIREYE	1	16.6700
3.REM./REPL.BURNER BLOWER MOTOR	0.800000	GAS REGULAT.	1	150.4800
4.REMOVE/REPLACE BURNER FIREYE	0.600000	SOLENOID	1	240.2400
5.REM./REPL.BURNER GAS REGULATOR	0.400000	BUTTERFLY	1	90.4000
6.REM./REPL.BURNER AUTO GAS VALVE	0.400000			581.6800
7.REM./REPL.BURN.SOLENOID VALVE-3	0.400000			
8.REM./REPL.BURN.BUTTERFLY VALVE	0.400000			
9.REPAIR CONTROLS	0.500000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	26.390	33.930
2	8.100	11.340	14.580
3	6.000	8.400	10.800
4	5.550	7.770	9.990
5	4.700	6.580	8.460
6	5.000	7.000	9.000
7	3.850	5.390	6.930
8	3.850	5.390	6.930
9	3.400	4.760	6.120
10	3.000	4.200	5.400
11	3.000	4.200	5.400

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.700000	1.410000	6.110000
Material Cost \$	581.680000		581.680000
Equipment Hours			5.110000

Components In This Task: 0981120

TASK DATA FORM

Task Code: 0981122

Component: BOILER GAS 2000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 3.2500 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.ANNUAL MAINTENANCE INSPECTION	2.500000			0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	2.500000	0.750000	3.250000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			3.250000

Components In This Task: 0981120

TASK DATA FORM

Task Code: 0981123

Component: BOILER GAS 2000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.3900 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.EXTERNAL INSPECTION	0.300000			0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.250	0.250	0.250
2	0.250	0.250	0.250
3	0.250	0.250	0.250
4	0.250	0.250	0.250
5	0.250	0.250	0.250
6	0.250	0.250	0.250
7	0.250	0.250	0.250
8	0.250	0.250	0.250
9	0.250	0.250	0.250
10	0.250	0.250	0.250
11	0.250	0.250	0.250

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.300000	0.090000	0.390000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			0.390000

Components In This Task: 0981120

TASK DATA FORM

Task Code: 0981124

Component: BOILER GAS 2000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 3.7700 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.CLEAN FIRE BOX	1.100000			0.0000
2.CLEAN COMPARTMENT	1.800000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	2.000	2.000	2.000
2	2.000	2.000	2.000
3	2.000	2.000	2.000
4	2.000	2.000	2.000
5	2.000	2.000	2.000
6	2.000	2.000	2.000
7	2.000	2.000	2.000
8	2.000	2.000	2.000
9	2.000	2.000	2.000
10	2.000	2.000	2.000
11	2.000	2.000	2.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.900000	0.870000	3.770000
Material Cost \$	0.000000		0.000000
Equipment Hours			3.770000

Components In This Task: 0981120

TASK DATA FORM

Task Code: 0981125

Component: BOILER GAS 2000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 10.4000 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.CLEAN TUBES (60)	8.000000			0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	5.000	5.000	5.000
2	5.000	5.000	5.000
3	5.000	5.000	5.000
4	5.000	5.000	5.000
5	5.000	5.000	5.000
6	5.000	5.000	5.000
7	5.000	5.000	5.000
8	5.000	5.000	5.000
9	5.000	5.000	5.000
10	5.000	5.000	5.000
11	5.000	5.000	5.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	8.000000	2.400000	10.400000
Material Cost \$	0.000000		0.000000
Equipment Hours			10.400000

Components In This Task: 0981120

TASK DATA FORM

Task Code: 0981126

Component: BOILER GAS 2000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.WEEKLY TOUR	0.200000			0.0000
2.ANALYZE WATER SAMPLES	0.300000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.019	0.019	0.019
2	0.019	0.019	0.019
3	0.019	0.019	0.019
4	0.019	0.019	0.019
5	0.019	0.019	0.019
6	0.019	0.019	0.019
7	0.019	0.019	0.019
8	0.019	0.019	0.019
9	0.019	0.019	0.019
10	0.019	0.019	0.019
11	0.019	0.019	0.019

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.650000

Components In This Task: 0981120

TASK DATA FORM

Task Code: 0981127

Component: BOILER GAS 2000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE BOILER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 46.1500 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE BOILER	142.000000	BOILER PKG.	1	14182.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	94.250	113.100	131.950
2	40.500	48.600	56.700
3	30.000	36.000	42.000
4	27.750	33.300	38.850
5	23.500	28.200	32.900
6	25.000	30.000	35.000
7	19.250	23.100	26.950
8	19.250	23.100	26.950
9	17.000	20.400	23.800
10	15.000	18.000	21.000
11	15.000	18.000	21.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	142.000000	42.600000	184.600000
Material Cost \$	14182.000000		14182.000000
Equipment Hours			46.150000

Components In This Task: 0981120

TASK DATA FORM

Task Code: 0981131

Component: BOILER GAS 10,000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR BOILER
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 6.1100 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE BURNER BLOWER	0.400000
2.REM./REPL.BURN. BLOWER BEARING	0.800000
3.REMOVE/REPLACE BURNER MOTOR	0.800000
4.REMOVE/REPLACE BURNER FIREYE	0.600000
5.REM./REPL.BURN. GAS REGULATOR	0.400000
6.REM./REPL.BURN.AUTO GAS VALVE	0.400000
7.REM./REPL.BURN.SOLENOID VALVE-3	0.400000
8.REM./REPL/BURN.BUTTERFLY VALVE	0.400000
9.REPAIR CONTROLS	0.500000

Material Resources

Description	Quantity	Unit Cost
MOTOR	1	83.8900
FIREYE	1	16.6700
GAS REGULAT.	1	1360.0000
AUTO GAS VAL	1	1545.9500
SOLENOID	1	302.0000
BUTTERFLY	1	128.0000
		<u>3436.5100</u>

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	26.390	33.930
2	8.100	11.340	14.580
3	6.000	8.400	10.800
4	5.550	7.770	9.990
5	4.700	6.580	8.460
6	5.000	7.000	9.000
7	3.850	5.390	6.930
8	3.850	5.390	6.930
9	3.400	4.760	6.120
10	3.000	4.200	5.400
11	3.000	4.200	5.400

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.700000	1.410000	6.110000
Material Cost \$	3436.510000		3436.510000
Equipment Hours			6.110000

Components In This Task: 0981130

TASK DATA FORM

Task Code: 0981132

Component: BOILER GAS 10,000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 5.5900 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE INSPECTION	4.300000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.300000	1.290000	5.590000
Material Cost \$	0.000000		0.000000
Equipment Hours			5.590000

Components In This Task: 0981130

TASK DATA FORM

Task Code: 0981133

Component: BOILER GAS 10,000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.3900 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.EXTERNAL INSPECTION	0.300000			0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.250	0.250	0.250
2	0.250	0.250	0.250
3	0.250	0.250	0.250
4	0.250	0.250	0.250
5	0.250	0.250	0.250
6	0.250	0.250	0.250
7	0.250	0.250	0.250
8	0.250	0.250	0.250
9	0.250	0.250	0.250
10	0.250	0.250	0.250
11	0.250	0.250	0.250

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.300000	0.090000	0.390000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			0.390000

Components In This Task: 0981130

TASK DATA FORM

Task Code: 0981134

Component: BOILER GAS 10,000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 3.7700 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.CLEAN FIRE BOX	1.100000			0.0000
2.CLEAN COMPARTMENT	1.800000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	2.000	2.000	2.000
2	2.000	2.000	2.000
3	2.000	2.000	2.000
4	2.000	2.000	2.000
5	2.000	2.000	2.000
6	2.000	2.000	2.000
7	2.000	2.000	2.000
8	2.000	2.000	2.000
9	2.000	2.000	2.000
10	2.000	2.000	2.000
11	2.000	2.000	2.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	2.900000	0.870000	3.770000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			3.770000

Components In This Task: 0981130

TASK DATA FORM

Task Code: 0981135

Component: BOILER GAS 10,000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 4.1600 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.CLEAN TUBES (155)	3.200000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	5.000	5.000	5.000
2	5.000	5.000	5.000
3	5.000	5.000	5.000
4	5.000	5.000	5.000
5	5.000	5.000	5.000
6	5.000	5.000	5.000
7	5.000	5.000	5.000
8	5.000	5.000	5.000
9	5.000	5.000	5.000
10	5.000	5.000	5.000
11	5.000	5.000	5.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.200000	0.960000	4.160000
Material Cost \$	0.000000		0.000000
Equipment Hours			4.160000

Components In This Task: 0981130

TASK DATA FORM

Task Code: 0981136

Component: BOILER GAS 10,000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.WEEKLY TUNE	0.200000
2.ANALYZE WATER SAMPLES	0.300000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.019	0.019	0.019
2	0.019	0.019	0.019
3	0.019	0.019	0.019
4	0.019	0.019	0.019
5	0.019	0.019	0.019
6	0.019	0.019	0.019
7	0.019	0.019	0.019
8	0.019	0.019	0.019
9	0.019	0.019	0.019
10	0.019	0.019	0.019
11	0.019	0.019	0.019

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.650000

Components In This Task: 0981130

TASK DATA FORM

Task Code: 0981137

Component: BOILER GAS 10,000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE BOILER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 62.1725 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE BOILER	191.300000

Material Resources

Description	Quantity	Unit Cost
BOILER PKG.	1	36000.0000
		36000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	94.250	113.100	131.950
2	40.500	48.600	56.700
3	30.000	36.000	42.000
4	27.750	33.300	38.850
5	23.500	28.200	32.900
6	25.000	30.000	35.000
7	19.250	23.100	26.950
8	19.250	23.100	26.950
9	17.000	20.400	23.800
10	15.000	18.000	21.000
11	15.000	18.000	21.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	191.300000	57.390000	248.690000
Material Cost \$	36000.000000		36000.000000
Equipment Hours			62.172500

Components In This Task: 0981130

TASK DATA FORM

Task Code: 0981211

Component: BOILER COAL 40,000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR BOILER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 262.6000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE COAL FEEDER	40.000000
2.REMOVE/REPL. VIBRATING GRATES 2	710.000000
3.REMOVE/REPLACE MOTOR	8.000000
4.REPAIR CONTROLS	50.000000

Material Resources

Description	Quantity	Unit Cost
COAL FEEDER	1	10000.0000
VIBRAT.GRATE	1	130000.0000
MOTOR		810.0000
		140000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	56.550	75.400	113.100
2	24.300	32.400	48.600
3	18.000	24.000	36.000
4	16.650	22.200	33.300
5	14.100	18.800	28.200
6	15.000	20.000	30.000
7	11.550	15.400	23.100
8	11.550	15.400	23.100
9	10.200	13.600	20.400
10	9.000	12.000	18.000
11	9.000	12.000	18.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	808.000000	242.400000	1050.400000
Material Cost \$	140000.000000		140000.000000
Equipment Hours			262.600000

Components In This Task: 0981210

TASK DATA FORM

Task Code: 0981212

Component: BOILER COAL 40,000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 34.1250 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources	
Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	2.500000
2.CLEAN WATERSIDE (590 TUBES)	28.300000
3.CLEAN FIRE-SIDE	19.100000
4.CLEAN FIRE BOX	0.400000
5.CLEAN COMPARTMENT	0.700000
6.CLEAN DRUM INTERIOR	1.500000

Material Resources		
Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	52.500000	15.750000	68.250000
Material Cost \$	0.000000		0.000000
Equipment Hours			34.125000

Components In This Task: 0982320

TASK DATA FORM

Task Code: 0981213

Component: BOILER COAL 40,000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.3900 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources	
Subtask Description	Labor Hrs
1.EXTERNAL INSPECTION	0.300000

Material Resources		
Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.250	0.250	0.250
2	0.250	0.250	0.250
3	0.250	0.250	0.250
4	0.250	0.250	0.250
5	0.250	0.250	0.250
6	0.250	0.250	0.250
7	0.250	0.250	0.250
8	0.250	0.250	0.250
9	0.250	0.250	0.250
10	0.250	0.250	0.250
11	0.250	0.250	0.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.300000	0.090000	0.390000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.390000

Components In This Task: 0981210

TASK DATA FORM

Task Code: 0981214

Component: BOILER COAL 40,000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNTY
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.WEEKLY TOUR	0.200000			0.0000
2.ANALYZE WATER SAMPLES	0.300000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.019	0.019	0.019
2	0.019	0.019	0.019
3	0.019	0.019	0.019
4	0.019	0.019	0.019
5	0.019	0.019	0.019
6	0.019	0.019	0.019
7	0.019	0.019	0.019
8	0.019	0.019	0.019
9	0.019	0.019	0.019
10	0.019	0.019	0.019
11	0.019	0.019	0.019

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.500000	0.150000	0.650000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			0.650000

Components In This Task: 0981210

TASK DATA FORM

Task Code: 0981215

Component: BOILER COAL 40,000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE BOILER
 Unit of Measure: COUNTY
 Persons per Team: 5 Task Duration: 4160.0000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE BOILER	16000.000000	BOILER	1	600000.0000
				600000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	94.250	113.100	131.950
2	40.500	48.600	56.700
3	30.000	36.000	42.000
4	27.750	33.300	38.850
5	23.500	28.200	32.900
6	25.000	30.000	35.000
7	19.250	23.100	26.950
8	19.250	23.100	26.950
9	17.000	20.400	23.800
10	15.000	18.000	21.000
11	15.000	18.000	21.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hour	16000.000000	4800.000000	20800.000000
Material	Cost \$	600000.000000		600000.000000
Equipment	Hours			4160.000000

Components In This Task: 0981210

TASK DATA FORM

Task Code: 0981221

Component: BOILER COAL 100,000 KBTU/H System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR BOILER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 328.4450 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE COAL FEEDER	100.000000
2.REMOVE/REPL.VIBRATING GRATES 5	900.000000
3.REMOVE/REPLACE MOTOR	10.000000
4.REPAIR CONTROLS	0.600000

Material Resources

Description	Quantity	Unit Cost
COAL FEEDER	1	60000.0000
VIBRAT.GRATE	1	200000.0000
MOTOR	1	1100.0000
		261100.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	56.550	75.400	113.100
2	24.300	32.400	48.600
3	18.000	24.000	36.000
4	16.650	22.200	33.300
5	14.100	18.800	28.200
6	15.000	20.000	30.000
7	11.550	15.400	23.100
8	11.550	15.400	23.100
9	10.200	13.600	20.400
10	9.000	12.000	18.000
11	9.000	12.000	18.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	1010.600000	303.180000	1313.780000
Material	Cost \$	261100.000000		261100.000000
Equipment	Hours			328.445000

Components In This Task: 0981220

TASK DATA FORM

Task Code: 0981222

Component: BOILER COAL 100,000 KBTU/H System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 44.7200 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	4.300000
2.CLEAN WATERSIDE (800 TUBES)	33.800000
3.CLEAN FIRESIDE	28.100000
4.CLEAN FIRE BOX	0.400000
5.CLEAN COMPARTMENT	0.700000
6.CLEAN DRUM INTERIOR	1.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	68.800000	20.640000	89.440000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			44.720000

Components In This Task: 0981220

TASK DATA FORM

Task Code: 0981223

Component: BOILER COAL 100,000 KBTU/H System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.3900 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.EXTERNAL INSPECTION	0.300000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.250	0.250	0.250
2	0.250	0.250	0.250
3	0.250	0.250	0.250
4	0.250	0.250	0.250
5	0.250	0.250	0.250
6	0.250	0.250	0.250
7	0.250	0.250	0.250
8	0.250	0.250	0.250
9	0.250	0.250	0.250
10	0.250	0.250	0.250
11	0.250	0.250	0.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.300000	0.090000	0.390000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.390000

Components In This Task: 0981220

TASK DATA FORM

Task Code: 0981224

Component: BOILER COAL 100,000 KBTU/H System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.WEEKLY TOUR	0.200000
2.ANALYZE WATER SAMPLES	0.300000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.019	0.019	0.019
2	0.019	0.019	0.019
3	0.019	0.019	0.019
4	0.019	0.019	0.019
5	0.019	0.019	0.019
6	0.019	0.019	0.019
7	0.019	0.019	0.019
8	0.019	0.019	0.019
9	0.019	0.019	0.019
10	0.019	0.019	0.019
11	0.019	0.019	0.019

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.650000

Components In This Task: 0981220

TASK DATA FORM

Task Code: 0981225

Component: BOILER COAL 100,000 KBTU/H System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE BOILER
 Unit of Measure: COUNT
 Persons per Team: 5 Task Duration: 8320.0000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE BOILER	32000.000000

Material Resources

Description	Quantity	Unit Cost
BOILER	1	1500000.0000
		1500000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	94.250	113.100	131.950
2	40.500	48.600	56.700
3	30.000	36.000	42.000
4	27.750	33.300	38.850
5	23.500	28.200	32.900
6	25.000	30.000	35.000
7	19.250	23.100	26.950
8	19.250	23.100	26.950
9	17.000	20.400	23.800
10	15.000	18.000	21.000
11	15.000	18.000	21.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	32000.000000	9600.000000	41600.000000
Material Cost \$	1500000.000000		1500000.000000
Equipment Hours			8320.000000

Components In This Task: 0981220

TASK DATA FORM

Task Code: 0981311

Component: BOILER OIL 250 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR BOILER
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 16.6400 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE BURNER BLOWER	0.400000
2.REM./REPL.BURNER BLOWER BEARING	0.800000
3.REM./REPL.BURNER BLOWER MOTOR	8.000000
4.REMOVE/REPLACE BURNER FIREYE	0.600000
5.REM./REPL. BURN IGH.TRANSFORMER	0.600000
6.REM./REPL.BURNER IGM. ELECTRODE	0.400000
7.REM./REPL. BURNER OIL PUMP	0.800000
8.REMOVE/REPLACE BURNER NOZZLE	0.600000
9.REPAIR CONTROLS	0.600000

Material Resources

Description	Quantity	Unit Cost
MOTOR	1	83.8900
FIREYE	1	16.6700
TRANSFORMER	1	58.2100
ELECTRODE	1	4.9900
PUMP	1	40.7000
NOZZLE	1	5.4500
		209.9100

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	26.390	33.930
2	8.100	11.340	14.580
3	6.000	8.400	10.800
4	5.550	7.770	9.990
5	4.700	6.580	8.460
6	5.000	7.000	9.000
7	3.850	5.390	6.930
8	3.850	5.390	6.930
9	3.400	4.760	6.120
10	3.000	4.200	5.400
11	3.000	4.200	5.400

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	12.800000	3.840000	16.640000
Material Cost \$	209.910000		209.910000
Equipment Hours			16.640000

Components In This Task: 0981310

TASK DATA FORM

Task Code: 0981312

Component: BOILER OIL 250 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.9500 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE INSPECTION	1.100000
2.CLEAN FIRE BOX	0.400000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.500000	0.450000	1.950000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.950000

Components In This Task: 0981310

TASK DATA FORM

Task Code: 0981313

Component: BOILER OIL 250 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.3900 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.EXTERNAL INSPECTIONS	0.300000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.250	0.250	0.250
2	0.250	0.250	0.250
3	0.250	0.250	0.250
4	0.250	0.250	0.250
5	0.250	0.250	0.250
6	0.250	0.250	0.250
7	0.250	0.250	0.250
8	0.250	0.250	0.250
9	0.250	0.250	0.250
10	0.250	0.250	0.250
11	0.250	0.250	0.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.300000	0.090000	0.390000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.390000

Components In This Task: 0981310

TASK DATA FORM

Task Code: 0981314

Component: BOILER OIL 250 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.WEEKLY TOUR	0.200000
2.ANALYZE WATER SAMPLES	0.300000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.019	0.019	0.019
2	0.019	0.019	0.019
3	0.019	0.019	0.019
4	0.019	0.019	0.019
5	0.019	0.019	0.019
6	0.019	0.019	0.019
7	0.019	0.019	0.019
8	0.019	0.019	0.019
9	0.019	0.019	0.019
10	0.019	0.019	0.019
11	0.019	0.019	0.019

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.650000

Components In This Task: 0981310

TASK DATA FORM

Task Code: 0981315

Component: BOILER OIL 250 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.1700 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.CLEAN BURNER	0.900000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.250	0.250	0.250
2	0.250	0.250	0.250
3	0.250	0.250	0.250
4	0.250	0.250	0.250
5	0.250	0.250	0.250
6	0.250	0.250	0.250
7	0.250	0.250	0.250
8	0.250	0.250	0.250
9	0.250	0.250	0.250
10	0.250	0.250	0.250
11	0.250	0.250	0.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.900000	0.270000	1.170000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.170000

Components In This Task: 0981310

TASK DATA FORM

Task Code: 0981316

Component: BOILER OIL 250 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE BOILER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 16.2500 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE BOILER	50.000000	BOILER PKG.	1	2990.0000
				2990.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	94.250	113.100	131.950
2	40.500	48.600	56.700
3	30.000	36.000	42.000
4	27.750	33.300	38.850
5	23.500	28.200	32.900
6	25.000	30.000	35.000
7	19.250	23.100	26.950
8	19.250	23.100	26.950
9	17.000	20.400	23.800
10	15.000	18.000	21.000
11	15.000	18.000	21.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	50.000000	15.000000	65.000000
Material	Cost \$	2990.000000		2990.000000
Equipment	Hours			16.250000

Components In This Task: 0981310

TASK DATA FORM

Task Code: 0981321

Component: BOILER OIL 2000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR BOILER
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 7.2800 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE BURNER BLOWER	0.400000	MOTOR	1	83.8900
2.REM./REPL. BURN. BLOWER BEARING	0.800000	FIREYE	1	16.6700
3.REM./REPL. BURNER BLOWER MOTOR	0.800000	TRANSFORMER	1	58.2100
4.REMOVE/REPLACE BURNER FIREYE	0.600000	ELECTRODE	1	4.9900
5.REM./REPL.BURN. IGN.TRANSFORMER	0.600000	PUMP	1	40.7000
6.REM./REPL. BURNER IGN ELECTRODE	0.400000	NOZZLE	1	5.4500
7.REMOVE/REPLACE BURNER OIL PUMP	0.800000			209.9100
8.REMOVE/REPLACE BURNER NOZZLE	0.600000			
9.REPAIR CONTROLS	0.600000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	26.390	33.930
2	8.100	11.340	14.580
3	6.000	8.400	10.800
4	5.550	7.770	9.990
5	4.700	6.580	8.460
6	5.000	7.000	9.000
7	3.850	5.390	6.930
8	3.850	5.390	6.930
9	3.400	4.760	6.120
10	3.000	4.200	5.400
11	3.000	4.200	5.400

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	5.600000	1.680000	7.280000
Material	Cost \$	209.910000		209.910000
Equipment	Hours			7.280000

Components In This Task: 0981310

TASK DATA FORM

Task Code: 0981322

Component: BOILER OIL 2000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 5.4600 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE INSPECTION	2.500000
2.CLEAN FIREBOX	0.400000
3.CLEAN TUBES (60)	0.600000
4.CLEAN COMPARTMENT	0.700000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		Low
	High	Average	
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.200000	1.260000	5.460000
Material Cost \$	0.000000		0.000000
Equipment Hours			5.460000

Components In This Task: 0981322

TASK DATA FORM

Task Code: 0981323

Component: BOILER OIL 2000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.5200 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.EXTERNAL INSPECTION	0.400000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		Low
	High	Average	
1	0.200	0.200	0.200
2	0.200	0.200	0.200
3	0.200	0.200	0.200
4	0.200	0.200	0.200
5	0.200	0.200	0.200
6	0.200	0.200	0.200
7	0.200	0.200	0.200
8	0.200	0.200	0.200
9	0.200	0.200	0.200
10	0.200	0.200	0.200
11	0.200	0.200	0.200

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.400000	0.120000	0.520000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.520000

Components In This Task: 0981320

TASK DATA FORM

Task Code: 0981324

Component: BOILER OIL 2000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.WEEKLY TOUR	0.200000
2.ANALYZE WATER SAMPLES	0.300000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.019	0.019	0.019
2	0.019	0.019	0.019
3	0.019	0.019	0.019
4	0.019	0.019	0.019
5	0.019	0.019	0.019
6	0.019	0.019	0.019
7	0.019	0.019	0.019
8	0.019	0.019	0.019
9	0.019	0.019	0.019
10	0.019	0.019	0.019
11	0.019	0.019	0.019

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.650000

Components In This Task: 0981320

TASK DATA FORM

Task Code: 0981325

Component: BOILER OIL 2000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.1700 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.CLEAN BURNER	0.900000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.200	0.200	0.200
2	0.200	0.200	0.200
3	0.200	0.200	0.200
4	0.200	0.200	0.200
5	0.200	0.200	0.200
6	0.200	0.200	0.200
7	0.200	0.200	0.200
8	0.200	0.200	0.200
9	0.200	0.200	0.200
10	0.200	0.200	0.200
11	0.200	0.200	0.200

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.900000	0.270000	1.170000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.170000

Components In This Task: 0981320

TASK DATA FORM

Task Code: 0981326

Component: BOILER OIL 2000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE BOILER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 46.1500 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE BOILER	142.000000

Material Resources

Description	Quantity	Unit Cost
BOILER PKG.	1	14182.0000
		14182.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	94.250	113.100	131.950
2	40.500	48.600	56.700
3	30.000	36.000	42.000
4	27.750	33.300	38.850
5	23.500	28.200	32.900
6	25.000	30.000	35.000
7	19.250	23.100	26.950
8	19.250	23.100	26.950
9	17.000	20.400	23.800
10	15.000	18.000	21.000
11	15.000	18.000	21.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	142.000000	42.600000	184.600000
Material Cost \$	14182.000000		14182.000000
Equipment Hours			46.150000

Components In This Task: 0981320

TASK DATA FORM

Task Code: 0981331

Component: BOILER OIL 10,000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR BOILER
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 7.2800 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE BURNER BLOWER	0.400000
2.REM./REPL.BURNER BLOWER BEARING	0.800000
3.REM./REPL.BURNER BLOWER MOTOR.	0.800000
4.REMOVE/REPLACE BURNER FIREYE	0.600000
5.REM./REPL.BURN.IGN. TRANSFORMER	0.600000
6.REM./REPL.BURN. IGN. ELECTRODE	0.400000
7.REMOVE/REPLACE BURNER OIL PUMP	0.800000
8.REMOVE/REPLACE BURNER NOZZLE	0.600000
9.REPAIR CONTROLS	0.600000

Material Resources

Description	Quantity	Unit Cost
MOTOR	1	83.8900
FIREYE	1	16.6700
TRANSFORMER	1	58.2100
ELECTRODE	1	4.9900
PUMP	1	64.9000
NOZZLE	1	5.4500
		234.1100

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	26.390	33.930
2	8.100	11.340	14.580
3	6.000	8.400	10.800
4	5.550	7.770	9.990
5	4.700	6.580	8.460
6	5.000	7.000	9.000
7	3.850	5.390	6.930
8	3.850	5.390	6.930
9	3.400	4.760	6.120
10	3.000	4.200	5.400
11	3.000	4.200	5.400

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	5.600000	1.680000	7.280000
Material Cost \$	234.110000		234.110000
Equipment Hours			7.280000

Components In This Task: 0981310

TASK DATA FORM

Task Code: 0981332

Component: BOILER OIL 10,000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 10.9200 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE INSPECTION	4.300000
2.CLEAN FIRE BOX	0.400000
3.CLEAN TUBES (155)	3.000000
4.CLEAN COMPARTMENT	0.700000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	8.400000	2.520000	10.920000
Material Cost \$	0.000000		0.000000
Equipment Hours			10.920000

Components In This Task: 0981330

TASK DATA FORM

Task Code: 0981333

Component: BOILER OIL 10,000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.5200 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.EXTERNAL INSPECTION	0.400000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.250	0.250	0.250
2	0.250	0.250	0.250
3	0.250	0.250	0.250
4	0.250	0.250	0.250
5	0.250	0.250	0.250
6	0.250	0.250	0.250
7	0.250	0.250	0.250
8	0.250	0.250	0.250
9	0.250	0.250	0.250
10	0.250	0.250	0.250
11	0.250	0.250	0.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.400000	0.120000	0.520000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.520000

Components In This Task: 0981330

TASK DATA FORM

Task Code: 0981334

Component: BOILER OIL 10,000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.WEEKLY TOUR	0.200000
2.ANALYZE WATER SAMPLES	0.300000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.019	0.019	0.019
2	0.019	0.019	0.019
3	0.019	0.019	0.019
4	0.019	0.019	0.019
5	0.019	0.019	0.019
6	0.019	0.019	0.019
7	0.019	0.019	0.019
8	0.019	0.019	0.019
9	0.019	0.019	0.019
10	0.019	0.019	0.019
11	0.019	0.019	0.019

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.650000

Components In This Task: 0981330

TASK DATA FORM

Task Code: 0981335

Component: BOILER OIL 10,000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.1700 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.CLEAN BURNER	0.900000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.200	0.200	0.200
2	0.200	0.200	0.200
3	0.200	0.200	0.200
4	0.200	0.200	0.200
5	0.200	0.200	0.200
6	0.200	0.200	0.200
7	0.200	0.200	0.200
8	0.200	0.200	0.200
9	0.200	0.200	0.200
10	0.200	0.200	0.200
11	0.200	0.200	0.200

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.900000	0.270000	1.170000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.170000

Components In This Task: 0981330

TASK DATA FORM

Task Code: 0981336

Component: BOILER OIL 10,000 KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE BOILER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 62.1725 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE BOILER	191.300000

Material Resources

Description	Quantity	Unit Cost
BOILER PKG.	1	36000.0000
		36000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	94.250	113.100	131.950
2	40.500	48.600	56.700
3	30.000	36.000	42.000
4	27.750	33.300	38.850
5	23.500	28.200	32.900
6	25.000	30.000	35.000
7	19.250	23.100	26.950
8	19.250	23.100	26.950
9	17.000	20.400	23.800
10	15.000	18.000	21.000
11	15.000	18.000	21.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	191.300000	57.390000	248.690000
Material Cost \$	36000.000000		36000.000000
Equipment Hours			62.172500

Components In This Task: 0981330

TASK DATA FORM

Task Code: 0981411

Component: BOILER GAS/OIL 2000 KBTU/H System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR BOILER
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 8.8400 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE BURNER BLOWER	0.400000
2.REM./REPL.BURNER BLOWER BEARING	0.800000
3.REM./REPL.BURNER BLOWER MOTOR	0.800000
4.REMOVE/REPLACE BURNER FIREYE	0.600000
5.REM./REPL.BURN.IGN. TRANSFORMER	0.600000
6.REM./REPL.BURN.IGN. ELECTRODE	0.400000
7.REMOVE/REPLACE BURNER OIL PUMP	0.800000
8.REMOVE/REPLACE BURNER NOZZLE	0.600000
9.REM./REPL. BURN. GAS REGULATOR	0.300000
10.REM./REPL. BURN. AUTO GAS VALVE	0.300000
11.REM./REPL.BURN.SOLENOID VALVE-3	0.300000
12.REM./REPL. BURN.BUTTERFLY VALVE	0.300000
13.REPAIR CONTROLS	0.600000

Material Resources

Description	Quantity	Unit Cost
MOTOR	1	83.8900
FIREYEE	1	16.6700
TRANSFORMER	1	58.2100
ELECTRODE	1	4.9900
PUMP	1	40.7000
NOZZLE	1	5.4500
AUTO-GAS VAL	1	150.4800
		360.3900

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	26.390	33.930
2	8.100	11.340	14.580
3	6.000	8.400	10.800
4	5.550	7.770	9.990
5	4.700	6.580	8.460
6	5.000	7.000	9.000
7	3.850	5.390	6.930
8	3.850	5.390	6.930
9	3.400	4.760	6.120
10	3.000	4.200	5.400
11	3.000	4.200	5.400

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	8.800000	2.040000	10.840000
Material Cost \$	360.390000		360.390000
Equipment Hours			8.840000

Components In This Task: 0981410

TASK DATA FORM

Task Code: 0981412

Component: BOILER GAS/OIL 2000 KBTU/H System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 7.4100 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	2.500000
2.CLEAN FIRE BOX	1.100000
3.CLEAN TUBES (60)	0.600000
4.CLEAN COMPARTMENT	1.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	5.700000	1.710000	7.410000
Material Cost \$	0.000000		0.000000
Equipment Hours			7.410000

Components In This Task: 0981410

TASK DATA FORM

Task Code: 0981413

Component: BOILER GAS/OIL 2000 KBTU/H System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.5200 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.EXTERNAL INSPECTION	0.400000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.250	0.250	0.250
2	0.250	0.250	0.250
3	0.250	0.250	0.250
4	0.250	0.250	0.250
5	0.250	0.250	0.250
6	0.250	0.250	0.250
7	0.250	0.250	0.250
8	0.250	0.250	0.250
9	0.250	0.250	0.250
10	0.250	0.250	0.250
11	0.250	0.250	0.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.400000	0.120000	0.520000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.520000

Components In This Task: 0981410

TASK DATA FORM

Task Code: 0981414

Component: BOILER GAS/OIL 2000 KBTU/H System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.WEEKLY TOUR	0.200000
2.ANALYZE WATER SAMPLE	0.300000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.019	0.019	0.019
2	0.019	0.019	0.019
3	0.019	0.019	0.019
4	0.019	0.019	0.019
5	0.019	0.019	0.019
6	0.019	0.019	0.019
7	0.019	0.019	0.019
8	0.019	0.019	0.019
9	0.019	0.019	0.019
10	0.019	0.019	0.019
11	0.019	0.019	0.019

SUMMARY

Resources	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.650000

Components In This Task: 0981410

TASK DATA FORM

Task Code: 0981415

Component: BOILER GAS/OIL 2000 KBTU/H System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE BOILER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 46.1500 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE BOTLER	142.000000

Material Resources

Description	Quantity	Unit Cost
BOILER PKG.	1	17632.0000
		17632.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	94.250	113.100	131.950
2	40.500	48.600	56.700
3	30.000	36.000	42.000
4	27.750	33.300	38.850
5	23.500	28.200	32.900
6	25.000	30.000	35.000
7	19.250	23.100	26.950
8	19.250	23.100	26.950
9	17.000	20.400	23.800
10	15.000	18.000	21.000
11	15.000	18.000	21.000

SUMMARY

Resources	Direct	Indirect	Total
Labor Hours	142.000000	42.150000	184.150000
Material Cost \$	17632.000000		17632.000000
Equipment Hours			46.150000

Components In This Task: 0981410

TASK DATA FORM

Task Code: 0981421

Component: BOILER GAS/OIL 20000 KBTU System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR BOILER
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 9.2300 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE BURNER BLOWER	0.400000
2.REM./REPL.BURNER BLOWER BEARING	0.800000
3.REM./REPL. BURNER BLOWER MOTOR	0.800000
4.REMOVE/REPLACE BURNER FIREYE	0.600000
5.REM./REPL.BURN.IGN. TRANSFORMER	0.600000
6.REM./REPL. BURN. IGN. ELECTRODE	0.400000
7.REMOVE/REPLACE BURNER OIL PUMP	0.800000
8.REMOVE/REPLACE BURNER NOZZLE	0.600000
9.REM./REPL. BURNER GAS REGULATOR	0.300000
10.REM./REPL.BURNER AUTO GAS VALVE	0.300000
11.REM./REPL.BURN.SOLENOID VALVE-3	0.300000
12.REM./REPL.BURN. BUTTERFLY VALVE	0.300000
13.REPAIR CONTROLS	0.600000
14.REMOVE/REPLACE AIR COMPRESSOR	0.300000

Material Resources

Description	Quantity	Unit Cost
MOTOR	1	132.8100
FIREYE	1	16.6700
TRANSFORMER	1	58.2100
ELECTRODE	1	4.9900
PUMP	1	64.9000
NOZZLE	1	5.4500
AIR COMPRES.	1	6210.0000
		6493.0300

FREQUENCY OF OCCURRENCE

Zone	High	Average	Low
1	18.850	26.390	33.930
2	8.100	11.340	14.580
3	6.000	8.400	10.800
4	5.550	7.770	9.990
5	4.700	6.580	8.460
6	5.000	7.000	9.000
7	3.850	5.390	6.930
8	3.850	5.390	6.930
9	3.400	4.760	6.120
10	3.000	4.200	5.400
11	3.000	4.200	5.400

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	7.100000	2.130000	9.230000
Material	Cost \$	6493.030000		6493.030000
Equipment	Hours			9.230000

Components In This Task: 0981410

TASK DATA FORM

Task Code: 0981422

Component: BOILER GAS/OIL 20000 KBTU System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 9.3600 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE INSPECTION	2.500000
2.CLEAN FIREBOX	1.100000
3.CLEAN TUBES (223)	2.100000
4.CLEAN COMPARTMENTS	1.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

FREQUENCY OF OCCURRENCE

Zone	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	7.200000	2.160000	9.360000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			9.360000

Components In This Task: 0981420

TASK DATA FORM

Task Code: 0981423

Component: BOILER GAS/OIL 20000 KBTU System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.5200 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.EXTERNAL INSPECTION	0.400000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.250	0.250	0.250
2	0.250	0.250	0.250
3	0.250	0.250	0.250
4	0.250	0.250	0.250
5	0.250	0.250	0.250
6	0.250	0.250	0.250
7	0.250	0.250	0.250
8	0.250	0.250	0.250
9	0.250	0.250	0.250
10	0.250	0.250	0.250
11	0.250	0.250	0.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.400000	0.120000	0.520000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.520000

Components In This Task: 0981420

TASK DATA FORM

Task Code: 0981424

Component: BOILER GAS/OIL 20000 KBTU System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.WEEKLY TOUR	0.200000
2.ANALYZE WATER SAMPLE	0.300000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.019	0.019	0.019
2	0.019	0.019	0.019
3	0.019	0.019	0.019
4	0.019	0.019	0.019
5	0.019	0.019	0.019
6	0.019	0.019	0.019
7	0.019	0.019	0.019
8	0.019	0.019	0.019
9	0.019	0.019	0.019
10	0.019	0.019	0.019
11	0.019	0.019	0.019

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.650000

Components In This Task: 0981420

TASK DATA FORM

Task Code: 0981425

Component: BOILER GAS/OIL 20000 KBTU System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE BOILER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 162.8250 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE BOTLER	501.000000	BOTLER PKG.	1	67000.0000
				67000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	94.250	113.100	131.950
2	40.500	48.600	56.700
3	30.000	36.000	42.000
4	27.750	33.300	38.850
5	23.500	28.200	32.900
6	25.000	30.000	35.000
7	19.250	23.100	26.950
8	19.250	23.100	26.950
9	17.000	20.400	23.800
10	15.000	18.000	21.000
11	15.000	18.000	21.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	501.000000	150.300000	651.300000
Material Cost \$	67000.000000		67000.000000
Equipment Hours			162.825000

Components In This Task: 0981420

TASK DATA FORM

Task Code: 0981511

Component: BOILR.PNEUMAT.COAL SPREAD. System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR SPREADER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 9.4250 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	CONVEY.MOTOR	1	925.0000
2.REMOVE/REPLACE CONVEYOR BEARING	8.000000	BLOWER MOTOR	1	560.0000
3.REMOVE/REPLACE CONVEYOR MOTOR	1.800000			1485.0000
4.REMOVE/REPLACE BLOWER	1.200000			
5.REMOVE/REPLACE BLOWER BEARINGS	1.200000			
6.REMOVE/REPLACE BLOWER MOTOR	1.800000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	37.700	56.550
2	8.100	16.200	24.300
3	6.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	14.500000	4.350000	18.850000
Material Cost \$	1485.000000		1485.000000
Equipment Hours			9.425000

Components In This Task: 0981510

TASK DATA FORM

Task Code: 0981512

Component: BOILR.PNEUMAT.COAL SPREAD. System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.3900 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.DAILY TOUR	0.300000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.003	0.003	0.003
2	0.003	0.003	0.003
3	0.003	0.003	0.003
4	0.003	0.003	0.003
5	0.003	0.003	0.003
6	0.003	0.003	0.003
7	0.003	0.003	0.003
8	0.003	0.003	0.003
9	0.003	0.003	0.003
10	0.003	0.003	0.003
11	0.003	0.003	0.003

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.300000	0.090000	0.390000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			0.390000

Components In This Task: 0981510

TASK DATA FORM

Task Code: 0981513

Component: BOILR.PNEUMAT.COAL SPREAD. System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.9100 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.WEEKLY MAINTENANCE	0.700000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.019	0.019	0.019
2	0.019	0.019	0.019
3	0.019	0.019	0.019
4	0.019	0.019	0.019
5	0.019	0.019	0.019
6	0.019	0.019	0.019
7	0.019	0.019	0.019
8	0.019	0.019	0.019
9	0.019	0.019	0.019
10	0.019	0.019	0.019
11	0.019	0.019	0.019

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.700000	0.210000	0.910000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			0.910000

Components In This Task: 0981510

TASK DATA FORM

Task Code: 0981514

Component: BOILR.PNEUMAT.COAL SPREAD System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.6900 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.MONTHLY MAINTENANCE	1.300000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.083	0.083	0.083
2	0.083	0.083	0.083
3	0.083	0.083	0.083
4	0.083	0.083	0.083
5	0.083	0.083	0.083
6	0.083	0.083	0.083
7	0.083	0.083	0.083
8	0.083	0.083	0.083
9	0.083	0.083	0.083
10	0.083	0.083	0.083
11	0.083	0.083	0.083

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	1.300000	0.390000	1.690000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			1.690000

Components In This Task: 0981510

TASK DATA FORM

Task Code: 0981515

Component: BOILR.PNEUMAT.COAL SPREAD System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 4.5500 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.ANNUAL MAINTENANCE	3.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	3.500000	1.050000	4.550000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			4.550000

Components In This Task: 0981510

TASK DATA FORM

Task Code: 0981516

Component: BOILR.PNEUMAT.COAL SPREAD. System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: ~~REPLACE~~ REPLACE COAL SPREADER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 45.5000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE SPREADER	140.000000	SPREADER	1	5300.0000
				5300.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	22.620	45.240	67.860
2	9.720	19.440	29.160
3	7.200	14.400	21.600
4	6.660	13.320	19.980
5	5.640	11.280	16.920
6	6.000	12.000	18.000
7	4.620	9.240	13.860
8	4.620	9.240	13.860
9	4.080	8.160	12.240
10	3.600	7.200	10.800
11	3.600	7.200	10.800

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	140.000000	42.000000	182.000000
Material Cost \$	5300.000000		5300.000000
Equipment Hours			45.500000

Components In This Task: 0981510

TASK DATA FORM

Task Code: 0981611

Component: ASH HANDLING SYSTEM System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR SYSTEM
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 4.8100 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE CONVEYOR BEARING	1.200000	CONVEY.MOTOR	1	1129.0000
2.REMOVE/REPLACE CONVEYOR MOTOR	1.800000	BLOWER MOTOR	1	568.0000
3.REMOVE/REPLACE BLOWER	1.400000			1697.0000
4.REMOVE/REPLACE BLOWER BEARINGS	1.200000			
5.REMOVE/REPLACE BLOWER MOTOR	1.800000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	37.700	56.550
2	8.100	16.200	24.300
3	6.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	7.400000	2.220000	9.620000
Material Cost \$	1697.000000		1697.000000
Equipment Hours			4.810000

Components In This Task: 0981610

TASK DATA FORM

Task Code: 0981612Component: ASH HANDLING SYSTEMSystem: HEATING GENERATIONSubsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 1 Task Duration: 0.9100 hoursTrade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.DAILY MAINTENANCE	0.700000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.003	0.003	0.003
2	0.003	0.003	0.003
3	0.003	0.003	0.003
4	0.003	0.003	0.003
5	0.003	0.003	0.003
6	0.003	0.003	0.003
7	0.003	0.003	0.003
8	0.003	0.003	0.003
9	0.003	0.003	0.003
10	0.003	0.003	0.003
11	0.003	0.003	0.003

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.700000	0.210000	0.910000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			0.910000

Components In This Task: 0981610

TASK DATA FORM

Task Code: 0981613Component: ASH HANDLING SYSTEMSystem: HEATING GENERATIONSubsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 1 Task Duration: 1.4300 hoursTrade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.MONTHLY MAINTENANCE	1.100000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.083	0.083	0.083
2	0.083	0.083	0.083
3	0.083	0.083	0.083
4	0.083	0.083	0.083
5	0.083	0.083	0.083
6	0.083	0.083	0.083
7	0.083	0.083	0.083
8	0.083	0.083	0.083
9	0.083	0.083	0.083
10	0.083	0.083	0.083
11	0.083	0.083	0.083

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	1.100000	0.330000	1.430000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			1.430000

Components In This Task: 0981610

TASK DATA FORM

Task Code: 0981614

Component: ASH HANDLING SYSTEM

System: HEATING GENERATION

Subsystem: EQUIPMENT

Task Description: PM PREVENTIVE MAINTENANCE

Unit of Measure: COUNT

Persons per Team: 1 Task Duration: 2.3400 hours

Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	1.800000

Material Resources

Description	Quantity	Unit Cost
		0.0000

FREQUENCY OF OCCURRENCE

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	1.800000	0.540000	2.340000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			2.340000

Components In This Task: 0981610

TASK DATA FORM

Task Code: 0981615

Component: ASH HANDLING SYSTEM

System: HEATING GENERATION

Subsystem: EQUIPMENT

Task Description: REPLACE REPLACE ASH HANDLING SYSTEM

Unit of Measure: COUNT

Persons per Team: 4 Task Duration: 2600.0000 hours

Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE SYSTEM	8000.000000

Material Resources

Description	Quantity	Unit Cost
ASH HAND.EQP	1	200000.0000
		200000.0000

FREQUENCY OF OCCURRENCE

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	56.550	75.400	94.250
2	24.300	32.400	40.500
3	18.000	24.000	30.000
4	16.650	22.200	27.750
5	14.100	18.800	23.500
6	15.000	20.000	25.000
7	11.550	15.400	19.250
8	11.550	15.400	19.250
9	10.200	13.600	17.000
10	9.000	12.000	15.000
11	9.000	12.000	15.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	8000.000000	2400.000000	10400.000000
Material	Cost \$	200000.000000		200000.000000
Equipment	Hours			2600.000000

Components In This Task: 0981610

TASK DATA FORM

Task Code: 0981711

Component: FUEL OIL EQUIPMENT

System: HEATING GENERATION

Subsystem: EQUIPMENT

Task Description: M/R REPAIR FUEL OIL EQUIPMENT

Unit of Measure: COUNT

Persons per Team: 2

Task Duration: 2.2945 hours

Trade: HEATING SYSTEM

Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REM./REPL. PUMP SEALS/BEARINGS	1.600000
2.REMOVE/REPLACE PUMP COUPLING	0.700000
3.REMOVE/REPLACE IMPELLER/SHAFT	0.700000
4.REMOVE/REPLACE MOTOR	0.500000
5.REMOVE/REPLACE STRAINERS	0.030000

Material Resources

Description	Quantity	Unit Cost
SEALS	1	5.0000
		5.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	37.700	56.550
2	8.100	16.200	24.300
3	6.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.530000	1.059000	4.589000
Material Cost \$	5.000000		5.000000
Equipment Hours			2.294500

Components In This Task: 0981710

TASK DATA FORM

Task Code: 0981712

Component: FUEL OIL EQUIPMENT

System: HEATING GENERATION

Subsystem: EQUIPMENT

Task Description: PM PREVENTIVE MAINTENANCE

Unit of Measure: COUNT

Persons per Team: 2

Task Duration: 0.2600 hours

Trade: HEATING SYSTEM

Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	0.400000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.400000	0.120000	0.520000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.260000

Components In This Task: 0981710

TASK DATA FORM

Task Code: 0981713

Component: FUEL OIL EQUIPMENT

System: HEATING GENERATION

Subsystem: EQUIPMENT

Task Description: REPLACE REPLACE FUEL OIL EQUIPMENT

Unit of Measure: COUNT

Persons per Team: 2 Task Duration: 1.3000 hours

Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE EQUIPMENT	2.000000

Material Resources

Description	Quantity	Unit Cost
FUEL OIL PMP	1	285.0000
		285.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	56.550	75.400
2	16.200	24.300	32.400
3	12.000	18.000	24.000
4	11.100	16.650	22.200
5	9.400	14.100	18.800
6	10.000	15.000	20.000
7	7.700	11.550	15.400
8	7.700	11.550	15.400
9	6.800	10.200	13.600
10	6.000	9.000	12.000
11	6.000	9.000	12.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.000000	0.600000	2.600000
Material Cost \$	285.000000		285.000000
Equipment Hours			1.300000

Components In This Task: 0981710

TASK DATA FORM

Task Code: 0981811

Component: CHEMICAL FEED SYSTEM

System: HEATING GENERATION

Subsystem: EQUIPMENT

Task Description: M/R REPAIR CHEMICAL FEED

Unit of Measure: COUNT

Persons per Team: 1 Task Duration: 5.1090 hours

Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR CONTROLS	0.030000
2.REMOVE/REPLACE AGITATOR MOTOR	1.800000
3.REM./REPL. PUMP SEALS/BEARINGS	1.600000
4.REMOVE/REPLACE PUMP MOTOR	0.500000

Material Resources

Description	Quantity	Unit Cost
AGITATOR MTR	1	50.0000
PUMP MOTOR	1	50.0000
		100.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	56.550	75.400
2	16.200	24.300	32.400
3	12.000	18.000	24.000
4	11.100	16.650	22.200
5	9.400	14.100	18.800
6	10.000	15.000	20.000
7	7.700	11.550	15.400
8	7.700	11.550	15.400
9	6.800	10.200	13.600
10	6.000	9.000	12.000
11	6.000	9.000	12.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	5.930000	1.179000	5.109000
Material Cost \$	100.000000		100.000000
Equipment Hours			5.109000

Components In This Task: 0981810

TASK DATA FORM

Task Code: 0981812

Component: CHEMICAL FEED SYSTEM

System: HEATING GENERATION

Subsystem: EQUIPMENT

Task Description: PM PREVENTIVE MAINTENANCE

Unit of Measure: COUNT

Persons per Team: 1 Task Duration: 0.6500 hours

Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.650000

Components In This Task: 0981810

TASK DATA FORM

Task Code: 0981813

Component: CHEMICAL FEED SYSTEM

System: HEATING GENERATION

Subsystem: EQUIPMENT

Task Description: REPLACE REPLACE CHEMICAL FEEDER

Unit of Measure: COUNT

Persons per Team: 2 Task Duration: 1.6250 hours

Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE FEEDER	2.500000

Material Resources

Description	Quantity	Unit Cost
CHEM.FEEDER	1	367.0000
		367.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	56.550	75.400
2	16.200	24.300	32.400
3	12.000	18.000	24.000
4	11.100	16.650	22.200
5	9.400	14.100	18.800
6	10.000	15.000	20.000
7	7.700	11.550	15.400
8	7.700	11.550	15.400
9	6.800	10.200	13.600
10	6.000	9.000	12.000
11	6.000	9.000	12.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.500000	0.750000	3.250000
Material Cost \$	367.000000		367.000000
Equipment Hours			1.625000

Components In This Task: 0981810

TASK DATA FORM

Task Code: 0981911

Component: FEED-WATER SUPPLY

System: HEATING GENERATION

Subsystem: EQUIPMENT

Task Description: M/R REPAIR FEED WATER SUPPLY PUMP

Unit of Measure: COUNT

Persons per Team: 1 Task Duration: 2.1710 hours

Trade: HEATING SYSTEM

Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR CONTROLS	0.300000
2.REMOVE/REPLACE PUMP SEALS/BRGS	0.220000
3.REMOVE/REPLACE PUMP MOTOR	1.100000
4.REMOVE/REPLACE PUMP COUPLING	0.050000

Material Resources

Description	Quantity	Unit Cost
PUMP MOTOR	1	3500.0000
COUPLING	1	250.0000
		3750.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	56.550	75.400
2	16.200	24.300	32.400
3	12.000	18.000	24.000
4	11.100	16.650	22.200
5	9.400	14.100	18.800
6	10.000	15.000	20.000
7	7.700	11.550	15.400
8	7.700	11.550	15.400
9	6.800	10.200	13.600
10	6.000	9.000	12.000
11	6.000	9.000	12.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	1.670000	0.501000	2.171000
Material	Cost \$	3750.000000		3750.000000
Equipment	Hours			2.171000

Components In This Task: 0981910

TASK DATA FORM

Task Code: 0981912

Component: FEED-WATER SUPPLY

System: HEATING GENERATION

Subsystem: EQUIPMENT

Task Description: PM PREVENTIVE MAINTENANCE

Unit of Measure: COUNT

Persons per Team: 1 Task Duration: 19.5000 hours

Trade: HEATING SYSTEM

Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	15.000000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	15.000000	4.500000	19.500000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			19.500000

Components In This Task: 0981910

TASK DATA FORM

Task Code: 0981913Component: FEED-WATER SUPPLYSystem: HEATING GENERATIONSubsystem: EQUIPMENTTask Description: REPLACE REPLACE FEEDWATER PUMPUnit of Measure: COUNTPersons per Team: 3 Task Duration: 9.5333 hoursTrade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE PUMP	22.000000

Material Resources

Description	Quantity	Unit Cost
PUMP	1	2600.0000
		2600.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	55.550	75.400
2	16.200	24.300	32.400
3	12.000	18.000	24.000
4	11.100	16.650	22.200
5	9.400	14.100	18.800
6	10.000	15.000	20.000
7	7.700	11.550	15.400
8	7.700	11.550	15.400
9	6.800	10.200	13.600
10	6.000	9.000	12.000
11	6.000	9.000	12.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	22.000000	6.600000	28.600000
Material Cost \$	2600.000000		2600.000000
Equipment Hours			9.533333

Components In This Task: 0981910

TASK DATA FORM

Task Code: 0981A11Component: DEAERATORSystem: HEATING GENERATIONSubsystem: EQUIPMENTTask Description: M/R REPAIR DEAERATORUnit of Measure: COUNTPersons per Team: 2 Task Duration: 0.3250 hoursTrade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REPAIR CONTROLS	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	37.700	56.550
2	8.100	16.200	24.300
3	6.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.325000

Components In This Task: 0981A10

TASK DATA FORM

Task Code: 0981A12

Component: DEAEERATOR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 9.7500 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	15.000000			0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	15.000000	4.500000	19.500000
Material Cost \$	0.000000		0.000000
Equipment Hours			9.750000

Components In This Task: 0981A10

TASK DATA FORM

Task Code: 0981A13

Component: DEAEERATOR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE DEAEERATOR
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 65.0000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE UNIT	200.000000	DEAEERATOR	1	20000.0000 20000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	75.400	113.100
2	16.200	32.400	48.600
3	12.000	24.000	36.000
4	11.100	22.200	33.300
5	9.400	18.800	28.200
6	10.000	20.000	30.000
7	7.700	15.400	23.100
8	7.700	15.400	23.100
9	6.800	13.600	20.400
10	6.000	12.000	18.000
11	6.000	12.000	18.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	200.000000	60.000000	260.000000
Material Cost \$	20000.000000		20000.000000
Equipment Hours			65.000000

Components In This Task: 0981A10

TASK DATA FORM

Task Code: 0981B11

Component: BLOWOFF SYSTEM

System: HEATING GENERATION

Subsystem: EQUIPMENT

Task Description: M/R REPAIR BOILER BLOWOFF SYSTEM

Unit of Measure: COUNT

Persons per Team: 1 Task Duration: 1.3000 hours

Trade: HEATING SYSTEM

Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REPAIR LEAK	1.000000

Material Resources

Description	Quantity	Unit Cost
WELD ROD	4 OZ.	1.0390
		4.1560

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	75.400	113.100
2	16.200	32.400	48.600
3	12.000	24.000	36.000
4	11.100	22.200	33.300
5	9.400	18.800	28.200
6	10.000	20.000	30.000
7	7.700	15.400	23.100
8	7.700	15.400	23.100
9	6.800	13.600	20.400
10	6.000	12.000	18.000
11	6.000	12.000	18.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.000000	0.300000	1.300000
Material Cost \$	4.156000		4.156000
Equipment Hours			1.300000

Components In This Task: 0981B10

TASK DATA FORM

Task Code: 0981B12

Component: BLOWOFF SYSTEM

System: HEATING GENERATION

Subsystem: EQUIPMENT

Task Description: REPLACE REPLACE BOILER BLOWOFF SYSTEM

Unit of Measure: COUNT

Persons per Team: 2 Task Duration: 1.3000 hours

Trade: HEATING SYSTEM

Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE BOILER BLOWOFF	2.000000

Material Resources

Description	Quantity	Unit Cost
BLOWOFF SYS.	1	139.0000
		139.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	56.550	75.400
2	16.200	24.300	32.400
3	12.000	18.000	24.000
4	11.100	16.650	22.200
5	9.400	14.100	18.800
6	10.000	15.000	20.000
7	7.700	11.550	15.400
8	7.700	11.550	15.400
9	6.800	10.200	13.600
10	6.000	9.000	12.000
11	6.000	9.000	12.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.000000	0.600000	2.600000
Material Cost \$	139.000000		139.000000
Equipment Hours			1.300000

Components In This Task: 0981B10

TASK DATA FORM

Task Code: 0981C11

Component: HOUSE FURN.GAS 25KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR FURNACE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 3.3280 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR CONTROLS	0.500000
2.REMOVE/REPLACE FAN MOTOR	1.800000
3.REMOVE/REPLACE AUTO VENT DPR	0.090000
4.REMOVE/REPLACE BURNER	0.170000

Material Resources

Description	Quantity	Unit Cost
FAN MOTOR	1	50.0000
AUTOVENT DPR	1	105.0000
BURNER	1	140.0000
		295.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	37.700	56.550
2	8.100	16.200	24.300
3	6.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.560000	0.768000	3.328000
Material Cost \$	295.000000		295.000000
Equipment Hours			3.328000

Components In This Task: 0981C10

TASK DATA FORM

Task Code: 0981C12

Component: HOUSE FURN.GAS 25KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 4.0300 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	1.200000
2.CLEAN UNIT	1.100000
3.CLEAN FIRE BOX & FLUE	0.400000
4.SERVICE FURNACE STACK SWITCH	0.100000
5.SERVICE FAN & MOTOR	0.200000
6.CONDUIT OPERATIONAL CHECK	0.100000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.100000	0.930000	4.030000
Material Cost \$	0.000000		0.000000
Equipment Hours			4.030000

Components In This Task: 0981C10

TASK DATA FORM

Task Code: 0981C13

Component: HOUSE FURN.GAS 25KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE FURNACE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 5.2000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE FURNACE	8.000000

Material Resources

Description	Quantity	Unit Cost
FURNACE	1	335.0000
		335.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	56.550	75.400
2	16.200	24.300	32.400
3	12.000	18.000	24.000
4	11.100	16.650	22.200
5	9.400	14.100	18.800
6	10.000	15.000	20.000
7	7.700	11.550	15.400
8	7.700	11.550	15.400
9	6.800	10.200	13.600
10	6.000	9.000	12.000
11	6.000	9.000	12.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	8.000000	2.400000	10.400000
Material Cost \$	335.000000		335.000000
Equipment Hours			5.200000

Components In This Task: 0981C10

TASK DATA FORM

Task Code: 0981C21

Component: HOUSE FURN.GAS 100KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR FURNACE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 3.3800 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR CONTROLS	0.500000
2.REMOVE/REPLACE FAN MOTOR	1.800000
3.REMOVE/REPLACE AUTO VENT DPR	0.100000
4.REMOVE/REPLACE BURNER	0.200000

Material Resources

Description	Quantity	Unit Cost
FAN MOTOR	1	88.0000
AUTOVENT DPR	1	105.0000
BURNER	1	160.0000
		353.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	37.700	56.550
2	8.100	16.200	24.300
3	6.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.600000	0.780000	3.380000
Material Cost \$	353.000000		353.000000
Equipment Hours			3.380000

Components In This Task: 0981C20

TASK DATA FORM

Task Code: 0981C22

Component: HOUSE FURN.GAS 100KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 4.0300 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	1.200000
2.CLEAN UNIT	1.100000
3.CLEAN FIRE BOX & FLUE	0.400000
4.SERVICE FURNACE STACK SWITCH	0.100000
5.SERVICE FAN & MOTOR	0.200000
6.CONDUCT OPERATIONAL CHECK	0.100000

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.100000	0.930000	4.030000
Material Cost \$	0.000000		0.000000
Equipment Hours			4.030000

Components In This Task: 0981C10

TASK DATA FORM

Task Code: 0981C23

Component: HOUSE FURN.GAS 100KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE FURNACE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 10.4000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE FURNACE	16.000000

Description	Quantity	Unit Cost
FURNACE	1	445.0000
		445.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	56.550	75.400
2	16.200	24.300	32.400
3	12.000	18.000	24.000
4	11.100	16.650	22.200
5	9.400	14.100	18.800
6	10.000	15.000	20.000
7	7.700	11.550	15.400
8	7.700	11.550	15.400
9	6.800	10.200	13.600
10	6.000	9.000	12.000
11	6.000	9.000	12.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	16.000000	4.800000	20.800000
Material Cost \$	445.000000		445.000000
Equipment Hours			10.400000

Components In This Task: 0981C20

TASK DATA FORM

Task Code: 0981C33Component: HOUSE FURN.GAS 200KBTU/HRSystem: HEATING GENERATIONSubsystem: EQUIPMENTTask Description: REPLACE REPLACE FURNACEUnit of Measure: COUNTPersons per Team: 2Task Duration: 10.4000 hoursTrade: HEATING SYSTEMTask Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE FURNACE	16.000000	FURNACE	1	1685.0000
				1685.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	56.550	75.400
2	16.200	24.300	32.400
3	12.000	18.000	24.000
4	11.100	16.650	22.200
5	9.400	14.100	18.800
6	10.000	15.000	20.000
7	7.700	11.550	15.400
8	7.700	11.550	15.400
9	6.600	10.200	13.600
10	6.000	9.000	12.000
11	6.000	9.000	12.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	16.000000	4.800000	20.800000
Material	Cost \$	1685.000000		1685.000000
Equipment	Hours			10.400000

Components In This Task: 0981C30

TASK DATA FORM

Task Code: 0981D11Component: HOUSE FURN.OIL 25KBTU/HRSystem: HEATING GENERATIONSubsystem: EQUIPMENTTask Description: M/R REPAIR FURNACEUnit of Measure: COUNTPersons per Team: 1Task Duration: 3.3800 hoursTrade: HEATING SYSTEMTask Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	FAN MOTOR	1	50.0000
2.REMOVE/REPLACE FAN MOTOR	1.800000	AUTOVENT DPR	1	154.0000
3.REMOVE/REPLACE AUTO VENT DPR	0.100000	BURNER	1	215.0000
4.REMOVE/REPLACE BURNER	0.200000			419.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	37.700	56.550
2	8.100	16.200	24.300
3	6.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	2.600000	0.780000	3.380000
Material	Cost \$	419.000000		419.000000
Equipment	Hours			3.380000

Components In This Task: 0981C10

TASK DATA FORM

Task Code: 0981C31

Component: HOUSE FURN.GAS 200KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR FURNACE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 3.3800 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	FAN MOTOR	1	120.0000
2.REM/REPLACE FAN MOTOR	1.800000	AUTO VT.DPR.	1	150.0000
3.REM/REPLACE AUTO VENT DPR	0.100000	BURNER	1	160.0000
4.REM/REPLACE BURNER	0.200000			430.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	37.700	56.550
2	8.100	16.200	24.300
3	6.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.800000	0.780000	3.380000
Material Cost \$	430.000000		430.000000
Equipment Hours			3.380000

Components In This Task: 0981C30

TASK DATA FORM

Task Code: 0981C32

Component: HOUSE FURN.GAS 200KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 4.0300 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	1.200000			0.0000
2.CLEAN UNIT	1.100000			
3.CLEAN FIRE BOX & FLUE	0.400000			
4.SERVICE FURNACE STACK SWITCH	0.100000			
5.SERVICE FAN & MOTOR	0.200000			
6.CONDUCT OPERATIONAL CHECK	0.100000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.100000	0.930000	4.030000
Material Cost \$	0.000000		0.000000
Equipment Hours			4.030000

Components In This Task: 0981C10

TASK DATA FORM

Task Code: 0981D12

Component: HOUSE FURN.OIL 25KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 5.3300 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	1.200000			0.0000
2.CLEAN UNIT	0.900000			
3.SERVICE FUEL OIL FILTER	0.800000			
4.SERVICE NOZZLE ASSEMBLY	0.200000			
5.SERVICE FUEL UNIT	0.200000			
6.SERVICE FIRE BOX & FINE	0.400000			
7.SERVICE FURNACE STACK SWITCH	0.100000			
8.SERVICE FAN & MOTOR	0.200000			
9.CONDUCT OPERATIONAL CHECK	0.100000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.100000	1.230000	5.330000
Material Cost \$	0.000000		0.000000
Equipment Hours			5.330000

Components In This Task: 0981D10

TASK DATA FORM

Task Code: 0981D13

Component: HOUSE FURN.OIL 25KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE FURNACE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 5.2000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE FURNACE	8.000000	FURNACE	1	800.0000 800.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	56.550	75.400
2	16.200	24.300	32.400
3	12.000	18.000	24.000
4	11.100	16.650	22.200
5	9.400	14.100	18.800
6	10.000	15.000	20.000
7	7.700	11.550	15.400
8	7.700	11.550	15.400
9	6.800	10.200	13.600
10	6.000	9.000	12.000
11	6.000	9.000	12.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	8.000000	2.400000	10.400000
Material Cost \$	800.000000		800.000000
Equipment Hours			5.200000

Components In This Task: 0981D10

TASK DATA FORM

Task Code: 0981D21

Component: HOUSE FURN.OIL 100KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR FURNACE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 3.3800 hours
 Trade: HEATING SYSTEM Task Classification: C

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	FAN MOTOR	1	88.0000
2.REMOVE/REPLACE FAN MOTOR	1.800000	AUTOVENT DPR	1	154.0000
3.REMOVE/REPLACE AUTO VENT DPR	0.100000	BURNER	1	215.0000
4.REMOVE/REPLACE BURNER	0.200000			457.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	37.700	56.550
2	8.100	16.200	24.300
3	6.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.600000	0.780000	3.380000
Material Cost \$	457.000000		457.000000
Equipment Hours			3.380000

Components In This Task: 0981D20

TASK DATA FORM

Task Code: 0981D22

Component: HOUSE FURN.OIL 100KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 5.3300 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	1.200000			0.0000
2.CLEAN UNIT	0.900000			
3.SERVICE FUEL OIL FILTER	0.800000			
4.SERVICE NOZZLE ASSEMBLY	0.200000			
5.SERVICE FUEL UNIT	0.200000			
6.SERVICE FIRE BOX & FLUE	0.400000			
7.SERVICE FURNACE STACK SWITCH	0.100000			
8.SERVICE FAN & MOTOR	0.200000			
9.CONDUIT OPERATIONAL CHECK	0.100000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.100000	1.230000	5.330000
Material Cost \$	0.000000		0.000000
Equipment Hours			5.330000

Components In This Task: 0981D20

TASK DATA FORM

Task Code: 0981D23

Component: HOUSE FURN.OIL 100KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE FURNACE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 10.4000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE FURNACE	16.000000	FURNACE	1	1281.6000
				1281.6000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	56.550	75.400
2	16.200	24.300	32.400
3	12.000	18.000	24.000
4	11.100	16.650	22.200
5	9.400	14.100	18.800
6	10.000	15.000	20.000
7	7.700	11.550	15.400
8	7.700	11.550	15.400
9	6.800	10.200	13.600
10	6.000	9.000	12.000
11	6.000	9.000	12.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	16.000000	4.800000	20.800000
Material Cost \$	1281.600000		1281.600000
Equipment Hours			10.400000

Components In This Task: 0981D20

TASK DATA FORM

Task Code: 0981D31

Component: HOUSE FURN.OIL 200KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR FURNACE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 3.3800 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	FAN MOTOR	1	120.0000
2.REMOVE/REPLACE FAN MOTOR	1.800000	AUTOVENT DPR	1	200.0000
3.REMOVE/REPLACE AUTO VENT DPR	0.100000	BURNER	1	215.0000
4.REMOVE/REPLACE BURNER	0.200000			535.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	37.700	75.400
2	8.100	16.200	32.400
3	6.000	12.000	24.000
4	5.550	11.100	22.200
5	4.700	9.400	18.800
6	5.000	10.000	20.000
7	3.850	7.700	15.400
8	3.350	7.700	15.400
9	3.400	6.800	13.600
10	3.000	6.000	12.000
11	3.000	6.000	12.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.600000	0.780000	3.380000
Material Cost \$	535.000000		535.000000
Equipment Hours			3.380000

Components In This Task: 0981D30

TASK DATA FORM

Task Code: 0981032

Component: HOUSE FURN.OIL 200KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 5.3300 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	1.200000
2.CLEAN UNIT	0.900000
3.SERVICE FUEL OIL FILTER	0.200000
4.SERVICE NOZZLE ASSEMBLY	0.200000
5.SERVICE FUEL UNIT	0.200000
6.SERVICE FIRE BOX & FLUE	0.400000
7.SERVICE FURNACE STACK SWITCH	0.100000
8.SERVICE FAN & MOTOR	0.200000
9.CONDUIT OPERATIONAL CHECK	0.100000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.100000	1.230000	5.330000
Material Cost \$	0.000000		0.000000
Equipment Hours			5.330000

Components In This Task: 0981030

TASK DATA FORM

Task Code: 0981033

Component: HOUSE FURN.OIL 200KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE FURNACE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 10.4000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE FURNACE	16.000000

Material Resources

Description	Quantity	Unit Cost
FURNACE	1	1505.0000
		1505.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	56.550	75.400
2	16.200	24.300	32.400
3	12.000	18.000	24.000
4	11.100	16.650	22.200
5	9.400	14.100	18.800
6	10.000	15.000	20.000
7	7.700	11.550	15.400
8	7.700	11.550	15.400
9	6.800	10.200	13.600
10	6.000	9.000	12.000
11	6.000	9.000	12.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	16.000000	4.800000	20.800000
Material Cost \$	1505.000000		1505.000000
Equipment Hours			10.400000

Components In This Task: 0981030

TASK DATA FORM

Task Code: 0981E11

Component: HOUSE FURN.ELECT 25KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR FURNACE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 4.2900 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	FAN MOTOR	1	50.0000
2.REMOVE/REPLACE FAN MOTOR	1.800000	HEAT ELECT.	1	150.0000
3.REMOVE/REPLACE HEAT ELEMENT	1.000000			200.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.650	37.700	56.550
2	8.100	16.200	24.300
3	7.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.300000	0.990000	4.290000
Material Cost \$	200.000000		200.000000
Equipment Hours			4.290000

Components In This Task: 0981E10

TASK DATA FORM

Task Code: 0981E12

Component: HOUSE FURN.ELECT 25KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.9500 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	1.200000			0.0000
2.SERVICE FAN & MOTOR	0.200000			
3.CONDUCT OPERATIONAL CHECK	0.100000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.500000	0.450000	1.950000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.950000

Components In This Task: 0981E10

TASK DATA FORM

Task Code: 0981E13

Component: HOUSE FURN.ELECT 25KBTU/HR System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE FURNACE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 5.2000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE FURNACE	8.000000

Material Resources

Description	Quantity	Unit Cost
FURNACE	1	567.0000
		567.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	56.550	75.400
2	16.200	24.300	32.400
3	12.000	18.000	24.000
4	11.100	16.650	22.200
5	9.400	14.100	18.800
6	10.000	15.000	20.000
7	7.700	11.550	15.400
8	7.700	11.550	15.400
9	6.800	10.200	13.600
10	6.000	9.000	12.000
11	6.000	9.000	12.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	8.000000	2.400000	10.400000
Material Cost \$	567.000000		567.000000
Equipment Hours			5.200000

Components In This Task: 0981E10

TASK DATA FORM

Task Code: 0981E21

Component: HOUSE FURN.ELECT.100KBTU System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: H/R REPAIR FURNACE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 4.2900 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR CONTROLS	0.500000
2.REMOVE/REPLACE FAN MOTOR	1.800000
3.REMOVE/REPLACE HEAT ELEMENT	1.000000

Material Resources

Description	Quantity	Unit Cost
FAN MOTOR	1	88.0000
HEAT ELEMENT	1	200.0000
		288.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	37.700	56.550
2	8.100	16.200	24.300
3	6.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.300000	0.990000	4.290000
Material Cost \$	288.000000		288.000000
Equipment Hours			4.290000

Components In This Task: 0981E20

TASK DATA FORM

Task Code: 0981E22

Component: HOUSE FURN.ELECT.100KBTU System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.9500 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	1.200000
2.SERVICE FAN & MOTOR	0.200000
3.CONDUIT OPERATIONAL CHECK	0.100000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.500000	0.450000	1.950000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.950000

Components In This Task: 0981E20

TASK DATA FORM

Task Code: 0981E23

Component: HOUSE FURN.ELECT.100KBTU System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE FURNACE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 10.4000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE FURNACE	16.000000

Material Resources

Description	Quantity	Unit Cost
FURNACE	1	708.7500
		708.7500

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	56.550	75.400
2	16.200	24.300	32.400
3	12.000	18.000	24.000
4	11.100	16.650	22.200
5	9.400	14.100	18.800
6	10.000	15.000	20.000
7	7.700	11.550	15.400
8	7.700	11.550	15.400
9	6.800	10.200	13.600
10	6.000	9.000	12.000
11	6.000	9.000	12.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	16.000000	4.800000	20.800000
Material Cost \$	708.750000		708.750000
Equipment Hours			10.400000

Components In This Task: 0981E20

TASK DATA FORM

Task Code: 0981E31

Component: HOUSE FURN.ELECT.200KBTU/H System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR FURNACE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 4.2900 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	FAN MOTOR	1	120.0000
2.REMOVE/REPLACE FAN MOTOR	1.800000	HEAT ELEMENT	1	250.0000
3.REMOVE/REPLACE HEAT ELEMENT	1.000000			370.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	37.700	56.550
2	8.100	16.200	24.300
3	6.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.300000	0.990000	4.290000
Material Cost \$	370.000000		370.000000
Equipment Hours			4.290000

Components In This Task: 0981E10

TASK DATA FORM

Task Code: 0981E32

Component: HOUSE FURN.ELECT.200KBTU/H System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.9500 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	1.200000			0.0000
2.SERVICE FAN & MOTOR	0.200000			
3.CONDUCT OPERATIONAL CHECK	0.100000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.500000	0.450000	1.950000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.950000

Components In This Task: 0981E30

TASK DATA FORM

Task Code: 0981E33

Component: HOUSE FURN.ELECT.200KBTU/H System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE FURNACE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 10.4000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FURNACE	16.000000

Material Resources

Description	Quantity	Unit Cost
FURNACE	1	900.0000
		900.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	56.550	75.400
2	16.200	24.300	32.400
3	12.000	18.000	24.000
4	11.100	16.650	22.200
5	9.400	14.100	18.800
6	10.000	15.000	20.000
7	7.700	11.550	15.400
8	7.700	11.550	15.400
9	6.800	10.200	13.600
10	6.000	9.000	12.000
11	6.000	9.000	12.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	16.000000	4.800000	20.800000
Material Cost \$	900.000000		900.000000
Equipment Hours			10.400000

Components In This Task: 0981E30

TASK DATA FORM

Task Code: 0981F01

Component: CAST IRON RADIATOR 10 SECT System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPLACE RADIATOR
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.6000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REPLACE RADIATOR	4.000000

Material Resources

Description	Quantity	Unit Cost
RADIATOR	1 UNIT	166.0000
		166.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	113.100	188.500	263.900
2	48.600	81.000	113.400
3	36.000	60.000	84.000
4	33.300	55.500	77.700
5	28.200	47.000	65.800
6	30.000	50.000	70.000
7	23.100	38.500	53.900
8	23.100	38.500	53.900
9	20.400	34.000	47.600
10	18.000	30.000	42.000
11	18.000	30.000	42.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.000000	1.200000	5.200000
Material Cost \$	166.000000		166.000000
Equipment Hours			2.600000

Components In This Task: 0981F00

TASK DATA FORM

Task Code: 0981G01

Component: BASEBOARD RADIATION 10 FT System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPLACE RADIATOR
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.6000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE RADIATOR	4.000000	BSBD. RADTR.	1 UNIT	219.0000
				219.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	75.400	113.100
2	16.200	32.400	48.600
3	12.000	24.000	36.000
4	11.100	22.200	33.300
5	9.400	18.800	28.200
6	10.000	20.000	30.000
7	7.700	15.400	23.100
8	7.700	15.400	23.100
9	6.800	13.600	20.400
10	6.000	12.000	18.000
11	6.000	12.000	18.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.000000	1.200000	5.200000
Material Cost \$	219.000000		219.000000
Equipment Hours			2.600000

Components In This Task: 0981G00

TASK DATA FORM

Task Code: 0981H01

Component: FINNED RADIATOR, WALL 10 F System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPLACE FIN. RADIATOR
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.6000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE RADIATOR	4.000000	FIN. RADIATR	1 UNIT	247.5000
				247.5000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	75.400	113.100
2	16.200	32.400	48.600
3	12.000	24.000	36.000
4	11.100	22.200	33.300
5	9.400	18.800	28.200
6	10.000	20.000	30.000
7	7.700	15.400	23.100
8	7.700	15.400	23.100
9	6.800	13.600	20.400
10	6.000	12.000	18.000
11	6.000	12.000	18.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.000000	1.200000	5.200000
Material Cost \$	247.500000		247.500000
Equipment Hours			2.600000

Components In This Task: 0981H01

TASK DATA FORM

Task Code: 0981101

Component: EXPANSION TANK System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REFILL EXPANSION TANK
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.0390 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REFILL AIR TANK	0.030000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	7.540	18.850	37.700
2	3.240	8.100	16.200
3	2.400	6.000	12.000
4	2.220	5.550	11.100
5	1.880	4.700	9.400
6	2.000	5.000	10.000
7	1.540	3.850	7.700
8	1.540	3.850	7.700
9	1.360	3.400	6.800
10	1.200	3.000	6.000
11	1.200	3.000	6.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.030000	0.009000	0.039000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.039000

Components In This Task: 0981100

TASK DATA FORM

Task Code: 0981102

Component: EXPANSION TANK System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE EXPANSION TANK
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 1.7355 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/INSTALL EXPANSION TANK	2.670000

Material Resources

Description	Quantity	Unit Cost
TANK	1	128.0000
		128.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	75.400	188.500	263.900
2	32.400	81.000	113.400
3	24.000	60.000	84.000
4	22.200	55.500	77.700
5	18.800	47.000	65.800
6	20.000	50.000	70.000
7	15.400	38.500	53.900
8	15.400	38.500	53.900
9	13.600	34.000	47.600
10	12.000	30.000	42.000
11	12.000	30.000	42.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.670000	0.801000	3.471000
Material Cost \$	128.000000		128.000000
Equipment Hours			1.735500

Components In This Task: 0981100

TASK DATA FORM

Task Code: 0981J11

Component: STEAM CONVERTOR, <300,000 System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR STEAM CONVERTOR
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 5.9410 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1. REPAIR HEAT EXCHANGER	4.570000

Material Resources

Description	Quantity	Unit Cost
WELD ROD	4 OZ	1.3900
		5.5600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	11.310	18.850	37.700
2	4.860	8.100	16.200
3	3.600	6.000	12.000
4	3.330	5.550	11.100
5	2.820	4.700	9.400
6	3.000	5.000	10.000
7	2.310	3.850	7.700
8	2.310	3.850	7.700
9	2.040	3.400	6.800
10	1.800	3.000	6.000
11	1.800	3.000	6.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.570000	1.371000	5.941000
Material Cost \$	5.560000		5.560000
Equipment Hours			5.941000

Components In This Task: 0981J10

TASK DATA FORM

Task Code: 0981J12

Component: STEAM CONVERTOR, <300,000 System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM INSPECT FOR LEAKS
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.0923 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1. CHECK RELIEF VALVE OPERATION	0.029000
2. CHECK FOR PROPER WATER TEMP.	0.042000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	2.000	2.000	2.000
2	2.000	2.000	2.000
3	2.000	2.000	2.000
4	2.000	2.000	2.000
5	2.000	2.000	2.000
6	2.000	2.000	2.000
7	2.000	2.000	2.000
8	2.000	2.000	2.000
9	2.000	2.000	2.000
10	2.000	2.000	2.000
11	2.000	2.000	2.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.071000	0.021300	0.092300
Material Cost \$	0.000000		0.000000
Equipment Hours			0.092300

Components In This Task: 0981J10

TASK DATA FORM

Task Code: 0981J13

Component: STEAM CONVERTOR, <300,000 System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE STEAM CONVERTOR
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 3.6790 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE EXCHANGER, INSTALL NEW	5.660000

Material Resources

Description	Quantity	Unit Cost
CONVERTOR	1	785.0000
		785.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	113.100	150.800
2	16.200	48.600	64.800
3	12.000	36.000	48.000
4	11.100	33.300	44.400
5	9.400	28.200	37.600
6	10.000	30.000	40.000
7	7.700	23.100	30.800
8	7.700	23.100	30.800
9	6.800	20.400	27.200
10	6.000	18.000	24.000
11	6.000	18.000	24.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	5.660000	1.698000	7.358000
Material Cost \$	785.000000		785.000000
Equipment Hours			3.679000

Components In This Task: 0981J10

TASK DATA FORM

Task Code: 0981K11

Component: FLASH TANK, 24 GAL. System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR FLASH TANK
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 5.9410 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR FLASH TANK	4.570000

Material Resources

Description	Quantity	Unit Cost
WELD ROD	4 OZ	1.3900
		5.5600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	11.310	18.850	37.700
2	4.860	8.100	16.200
3	3.600	6.000	12.000
4	3.330	5.550	11.100
5	2.820	4.700	9.400
6	3.000	5.000	10.000
7	2.310	3.850	7.700
8	2.310	3.850	7.700
9	2.040	3.400	6.800
10	1.800	3.000	6.000
11	1.800	3.000	6.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.570000	1.371000	5.941000
Material Cost \$	5.560000		5.560000
Equipment Hours			5.941000

Components In This Task: 0981K10

TASK DATA FORM

Task Code: 0981K12Component: FLASH TANK, 24 GAL.System: HEATING GENERATIONSubsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCE ON FLASH TANKUnit of Measure: COUNTPersons per Team: 1 Task Duration: 0.0390 hoursTrade: HEATING SYSTEM Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs
T.CHECK FOR LEAKS	0.030000

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.030000	0.009000	0.039000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.039000

Components In This Task: 0981K10

TASK DATA FORM

Task Code: 0981K13Component: FLASH TANK, 24 GAL.System: HEATING GENERATIONSubsystem: EQUIPMENTTask Description: REPLACE REPLACE FLASH TANKUnit of Measure: COUNTPersons per Team: 2 Task Duration: 3.2500 hoursTrade: HEATING SYSTEM Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs
T.REMOVE OLD AND INSTALL NEW TANK	5.000000

Description	Quantity	Unit Cost
FLASH TANK	1	139.0000
		139.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	56.550	75.400
2	8.100	24.300	32.400
3	6.000	18.000	24.000
4	5.550	16.650	22.200
5	4.700	14.100	18.800
6	5.000	15.000	20.000
7	3.850	11.550	15.400
8	3.850	11.550	15.400
9	3.400	10.200	13.600
10	3.000	9.000	12.000
11	3.000	9.000	12.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	5.000000	1.500000	6.500000
Material Cost \$	139.000000		139.000000
Equipment Hours			3.250000

Components In This Task: 0981K10

TASK DATA FORM

Task Code: 0981L01

Component: STORAGE TANK, DHW

System: HEATING GENERATION

Subsystem: EQUIPMENT

Task Description: M/R CLEAN AND SCRAPE TANK

Unit of Measure: COUNT

Persons per Team: 1 Task Duration: 3.7330 hours

Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.OPEN AND CLOSE VALVES	0.016920
2.REMOVE NUTS ON COIL	0.106400
3.REMOVE COIL BOLTS	0.126500
4.REMOVE COIL	0.036180
5.REMOVE GASKETS	0.025300
6.DISCONNECT UNIONS	0.109440
7.FILL AND DRAIN TANK	1.140000
8.CLEAN COIL FACES	0.071380
9.CLEAN COIL	0.035690
10.CLEAN INSIDE OF TANK--SCRAPE 2	0.586800
11.CONNECT HOSE	0.038430
12.DISCONNECT HOSE	0.036480
13.HOSE TO FLUSH TANK--25 GALLONS	0.190000
14.MAKE TWO GASKETS	0.070360
15.INSTALL GASKET	0.003960
16.INSTALL COIL	0.036180
17.INSTALL BOLTS IN COIL	0.019800
18.CONNECT UNIONS	0.115290
19.INSTALL NUTS ON BOLTS	0.106400

Material Resources

Description	Quantity	Unit Cost
GASKET	1	5.0000
		5.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.210	8.420	16.840
2	1.880	3.760	7.520
3	1.320	2.640	5.280
4	1.240	2.480	4.960
5	1.080	2.160	4.320
6	1.000	2.000	4.000
7	0.880	1.760	3.520
8	0.830	1.660	3.320
9	0.770	1.540	3.080
10	0.720	1.440	2.880
11	0.730	1.460	2.920

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.871510	0.861453	3.732963
Material Cost \$	5.000000		5.000000
Equipment Hours			3.732963

Components In This Task: 0981L00

TASK DATA FORM

Task Code: 0981L02

Component: STORAGE TANK, DHW

System: HEATING GENERATION

Subsystem: EQUIPMENT

Task Description: REPLACE REPLACE STORAGE TANK

Unit of Measure: COUNT

Persons per Team: 2 Task Duration: 1.7970 hours

Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.TURN VALVE OFF AND ON	0.016920
2.CONNECT DRAIN HOSE	0.038430
3.DISCONNECT DRAIN HOSE	0.036480
4.DRAIN OLD TANK, FILL NEW TANK	0.608000
5.DISCONNECT UNIONS	0.072960
6.CONNECT UNIONS	0.076860
7.REMOVE RELIEF VALVE	0.049090
8.REMOVE OLD HEATER & POSITON NEW	0.194380
9.INSTALL RELIEF VALVE	0.047580
10.INSTL 4 ADAPTERS TO NEW HEATER	0.153720
11.INSTALL DRAIN COCK ON HEATER	0.038430
12.MATERIAL HANDLING	0.310770
13.INSULATE PIPING FITNGS @ HEATER	0.174040
14.UNCRAT HTR-12 PC LUMBER,8NLS/PC	0.946920

Material Resources

Description	Quantity	Unit Cost
TANK	1	327.0000
		327.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	84.200	210.500	294.700
2	37.600	94.000	131.600
3	26.400	66.000	92.400
4	24.800	62.000	86.800
5	21.600	54.000	75.600
6	20.000	50.000	70.000
7	17.600	44.000	61.600
8	16.600	41.500	58.100
9	15.400	38.500	53.900
10	14.400	36.000	50.400
11	14.600	36.500	51.100

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.764580	0.829374	3.593954
Material Cost \$	327.000000		327.000000
Equipment Hours			1.796977

Components In This Task: 0981L02

TASK DATA FORM

Task Code: 0981M11

Component: IND. FUR. GAS/OIL 500 MBU System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR FURNACE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 4.2250 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE BURNER BLOWER	0.400000
2.REM/REPLACE BURN BLOWER BEARING	0.800000
3.REM/REPLACE BURN. BLOWER MOTOR	0.800000
4.REMOVE/REPLACE BURNER FIREYE	0.600000
5.REM/REPLACE BURN. GAS REGULATOR	0.400000
6.REM/REPLACE BURN.AUTO GAS VALVE	0.400000
7.REM/REPLACE BURN.SOLENOID VALVE	0.400000
8.REM/PEPL BURN BUTTERFLY VAVLE-3	0.400000
9.REPAIR CONTROLS	0.500000
10.REMOVE/REPLACE FAN MOTOR	1.800000

Material Resources

Description	Quantity	Unit Cost
BLOWER MOTOR	1	93.8900
FIREYE	1	16.7000
GAS REG.	1	17.9700
SOLENOID	1	165.0000
BUTTFLY VALV	1	7.5000
FAN MOTOR	1	250.0000
		551.0600

FREQUENCY OF OCCURRENCE

Zone	High	Average	Low
1	21.050	29.470	37.890
2	9.400	13.160	16.920
3	6.600	9.240	11.880
4	6.200	8.680	11.160
5	5.400	7.560	9.720
6	5.000	7.000	9.000
7	4.400	6.160	7.920
8	4.150	5.810	7.470
9	3.850	5.390	6.930
10	3.600	5.040	6.480
11	3.650	5.110	6.570

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	6.500000	1.950000	8.450000
Material Cost \$	551.060000		551.060000
Equipment Hours			4.225000

Components In This Task: 0981M10

TASK DATA FORM

Task Code: 0981M12

Component: IND. FUR. GAS/OIL 500 MBU System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTATIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.4300 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE INSPECTION	1.100000

Material Resources

Description	Quantity	Unit Cost
		0.0000

FREQUENCY OF OCCURRENCE

Zone	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.100000	0.330000	1.430000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.430000

Components In This Task: 0981M10

TASK DATA FORM

Task Code: 0981M13

Component: IND. FUR. GAS/OIL 500 MBU System: HEATING GENERATION

Subsystem: EQUIPMENT

Task Description: PM PREVENTATIVE MAINTENANCE

Unit of Measure: COUNT

Persons per Team: 1 Task Duration: 0.3900 hours

Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.EXTERNAL INSPECTION	0.300000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.250	0.250	0.250
2	0.250	0.250	0.250
3	0.250	0.250	0.250
4	0.250	0.250	0.250
5	0.250	0.250	0.250
6	0.250	0.250	0.250
7	0.250	0.250	0.250
8	0.250	0.250	0.250
9	0.250	0.250	0.250
10	0.250	0.250	0.250
11	0.250	0.250	0.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.300000	0.090000	0.390000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.390000

Components In This Task: 0981M10

TASK DATA FORM

Task Code: 0981M14

Component: IND. FUR. GAS/OIL 500 MBU System: HEATING GENERATION

Subsystem: EQUIPMENT

Task Description: PM PREVENTATIVE MAINTENANCE

Unit of Measure: COUNT

Persons per Team: 2 Task Duration: 0.7150 hours

Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.CLEAN FIRE BOX	1.100000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	2.000	2.000	2.000
2	2.000	2.000	2.000
3	2.000	2.000	2.000
4	2.000	2.000	2.000
5	2.000	2.000	2.000
6	2.000	2.000	2.000
7	2.000	2.000	2.000
8	2.000	2.000	2.000
9	2.000	2.000	2.000
10	2.000	2.000	2.000
11	2.000	2.000	2.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.100000	0.330000	1.430000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.715000

Components In This Task: 0981M10

TASK DATA FORM

Task Code: 0981M15

Component: IND. FUR. GAS/OIL 500 MBU System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE FURNACE
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 16.2500 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE FURNACE	50.000000	FURNACE	1	6400.0000
				6400.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	105.250	126.300	147.350
2	47.000	56.400	65.800
3	33.000	39.600	46.200
4	31.000	37.200	43.400
5	27.000	32.400	37.800
6	25.000	30.000	35.000
7	22.000	26.400	30.800
8	20.750	24.900	29.050
9	19.250	23.100	26.950
10	18.000	21.600	25.200
11	18.250	21.900	25.550

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	50.000000	15.000000	65.000000
Material Cost \$	6400.000000		6400.000000
Equipment Hours			16.250000

Components In This Task: 0981M10

TASK DATA FORM

Task Code: 0981M21

Component: IND.FURN.GAS/OIL 2000 MBTU System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR FURNACE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 6.6300 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE BURNER BLOWER	0.400000	BLOWER MOTOR	1	83.8900
2.REM/REPL BURNER BLOWER BEARING	0.800000	FIREYE	1	16.600
3.REM/REPL BURNER BLOWER MOTOR	0.800000	GAS REGULAT.	1	150.4800
4.REMOVE/REPLACE BURNER FIREYE	0.600000	SOLENOID	1	240.2400
5.REM/REPL BURNER GAS REGULATOR	0.400000	BUTTERFLY	1	90.4000
6.REM/REPL BURNER AUTO GAS VALVE	0.400000	FAN MOTOR	1	564.0000
7.REM/REPL BURNER SOLENOID VALV-3	0.400000			1145.6800
8.REM/REPL BURN BUTTERFLY VALVE	0.400000			
9.REPAIR CONTROLS	0.400000			
10.REM/REPL FAN MOTOR	0.500000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	21.050	29.470	37.890
2	9.400	13.160	16.920
3	6.600	9.240	11.880
4	6.200	8.680	11.160
5	5.400	7.560	9.720
6	5.000	7.000	9.000
7	4.400	6.160	7.920
8	4.150	5.810	7.470
9	3.850	5.390	6.930
10	3.600	5.040	6.480
11	3.650	5.110	6.570

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	5.100000	1.530000	6.630000
Material Cost \$	1145.680000		1145.680000
Equipment Hours			6.630000

Components In This Task: 0981M20

TASK DATA FORM

Task Code: 0981M22

Component: IND.FURN.GAS/OIL 2000 MBTU System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 3.2500 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.ANNUAL MAINTENANCE INSPECTION	2.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.500000	0.750000	3.250000
Material Cost \$	0.000000		0.000000
Equipment Hours			3.250000

Components In This Task: 0981M20

TASK DATA FORM

Task Code: 0981M23

Component: IND.FURN.GAS/OIL 2000 MBTU System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.3900 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.EXTERNAL INSPECTION	0.300000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.250	0.250	0.250
2	0.250	0.250	0.250
3	0.250	0.250	0.250
4	0.250	0.250	0.250
5	0.250	0.250	0.250
6	0.250	0.250	0.250
7	0.250	0.250	0.250
8	0.250	0.250	0.250
9	0.250	0.250	0.250
10	0.250	0.250	0.250
11	0.250	0.250	0.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.300000	0.090000	0.390000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.390000

Components In This Task: 0981M20

TASK DATA FORM

Task Code: 0981M24

Component: IND.FURN.GAS/OIL 2000 MBTU System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 3.7700 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.CLEAN FIRE BOX	1.100000
2.CLEAN COMPARTMENT	1.800000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	2.000	2.000	2.000
2	2.000	2.000	2.000
3	2.000	2.000	2.000
4	2.000	2.000	2.000
5	2.000	2.000	2.000
6	2.000	2.000	2.000
7	2.000	2.000	2.000
8	2.000	2.000	2.000
9	2.000	2.000	2.000
10	2.000	2.000	2.0
11	2.900	2.000	2.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	2.900000	0.870000	3.770000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			3.770000

Components In This Task: 0981M20

TASK DATA FORM

Task Code: 0981M25

Component: IND.FURN.GAS/OIL 2000 MBTU System: HEATING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE FURNACE
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 46.1500 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE FURNACE	142.000000

Material Resources

Description	Quantity	Unit Cost
FURNACE	1	13000.0000
		13000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	105.250	126.300	147.350
2	47.000	56.400	65.800
3	33.000	39.600	46.200
4	31.000	37.200	43.400
5	27.000	32.400	37.800
6	25.000	30.000	35.000
7	22.000	26.400	30.800
8	20.750	24.900	29.050
9	19.250	23.100	26.950
10	18.000	21.600	25.200
11	18.250	21.900	25.550

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	142.000000	42.600000	184.600000
Material	Cost \$	13000.000000		13000.000000
Equipment	Hours			46.150000

Components In This Task: 0981M20

TASK DATA FORM

Task Code: 0981N01Component: SURGE TANK, 1000 GALSystem: HEATING GENERATIONSubsystem: EQUIPMENTTask Description: REPLACE REPLACE TANKUnit of Measure: COUNTPersons per Team: 2 Task Duration: 2.6000 hoursTrade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE TANK	4.000000

Material Resources

Description	Quantity	Unit Cost
TANK	1	1485.0000
		1485.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	42.100	63.150	84.200
2	18.800	28.200	37.600
3	13.200	19.800	26.400
4	12.400	18.600	24.800
5	10.800	16.200	21.600
6	10.000	15.000	20.000
7	8.800	13.200	17.600
8	8.300	12.450	16.600
9	7.700	11.550	15.400
10	7.200	10.800	14.400
11	7.300	10.950	14.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.000000	1.200000	5.200000
Material Cost \$	1485.000000		1485.000000
Equipment Hours			2.600000

Components In This Task: 0981N00

TASK DATA FORM

Task Code: 0984111Component: PIPE/FITTINGS, ST. & C.I.System: HEATING GENERATIONSubsystem: DIST. PIPING SYSTEMTask Description: M/R REPAIR HOT WATER PIPEUnit of Measure: 1000 LINEAR FEETPersons per Team: 1 Task Duration: 0.3250 hoursTrade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.DISCONNECT FLANGE JOINT	0.084000
2.REMOVE FLANGE GASKET	0.013000
3.MAKE NEW GASKET	0.035000
4.INSTALL NEW GASKET	0.013000
5.CONNECT FLANGE JOINTS	0.072000
6.CLEAN FLANGE FACES	0.033000

Material Resources

Description	Quantity	Unit Cost
GASKET	1	0.1600
		0.1600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	56.550	75.400
2	16.200	24.300	32.400
3	12.000	18.000	24.000
4	11.100	16.650	22.200
5	9.400	14.100	18.800
6	10.000	15.000	20.000
7	7.700	11.550	15.400
8	7.700	11.550	15.400
9	6.800	10.200	13.600
10	6.000	9.000	12.000
11	6.000	9.000	12.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.250000	0.075000	0.325000
Material Cost \$	0.160000		0.160000
Equipment Hours			0.325000

Components In This Task: 0984110

TASK DATA FORM

Task Code: 0984112

Component: PIPE/FITTINGS, ST. & C.I. System: HEATING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: REPLACE REPLACE HOT WATER PIPE, 12" SECTION
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 2 Task Duration: 5.3723 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1. CHECK BREAK OR LEAK	0.012000	PIPE	12 FT	3.2500
2. CUT WATER VALVE ON AND OFF	0.008000			39.0000
3. REMOVE FIRST BROKEN SECTION	1.401000			
4. REMOVE ADDITIONAL SECTIONS	0.605000			
5. MATERIAL HANDLING	0.207000			
6. CLEAN JOINTS	0.033000			
7. INSTALL SECTION OF PIPE	1.579000			
8. INSTALL LAST SECTION	4.413000			
9. CHECK FOR LEAKS ADDITIONAL SECT	0.007000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	113.100	188.500	263.900
2	48.600	81.000	113.400
3	36.000	60.000	84.000
4	33.300	55.500	77.700
5	28.200	47.000	65.800
6	30.000	50.000	70.000
7	23.100	38.500	53.900
8	23.100	38.500	53.900
9	20.400	34.000	47.600
10	18.000	30.000	42.000
11	18.000	30.000	42.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	8.265000	2.479500	10.744500
Material Cost \$	39.000000		39.000000
Equipment Hours			5.372250

Components In This Task: 0984110

TASK DATA FORM

Task Code: 0984121

Component: PIPE/FITTINGS, COPPER System: HEATING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: M/R REPAIR SOLDER JOINT
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 1 Task Duration: 0.1846 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1. MEASURE, CUT AND REAM BOTH ENDS	0.041000	SOLDER	.5 OZ	0.1600
2. SOLDER FITTING	0.101000			0.0800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	37.700	56.550
2	8.100	16.200	24.300
3	6.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.142000	0.042600	0.184600
Material Cost \$	0.080000		0.080000
Equipment Hours			0.184600

Components In This Task: 0984120

TASK DATA FORM

Task Code: 0984122

Component: PIPE/FITTINGS, COPPER

System: HEATING GENERATION

Subsystem: DIST. PIPING SYSTEM

Task Description: REPLACE REPLACE HOT WATER PIPE, 12' SECTION

Unit of Measure: 1000 LINEAR FEET

Persons per Team: 2

Task Duration: 2.7755 hours

Trade: HEATING SYSTEM

Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE 12' SECTION, INSTALL NEW	4.270000

Material Resources

Description	Quantity	Unit Cost
PIPE	12 FT	4.0100
		48.1200

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	75.400	113.100	188.500
2	32.400	48.600	81.000
3	24.000	36.000	60.000
4	22.200	33.300	55.500
5	18.800	28.200	47.000
6	20.000	30.000	50.000
7	15.400	23.100	38.500
8	15.400	23.100	38.500
9	13.600	20.400	34.000
10	12.000	18.000	30.000
11	12.000	18.000	30.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.270000	1.281000	5.551000
Material Cost \$	48.120000		48.120000
Equipment Hours			2.775500

Components In This Task: 0984120

TASK DATA FORM

Task Code: 0984131

Component: PIPE AND FITTINGS, PVC

System: HEATING GENERATION

Subsystem: DIST. PIPING SYSTEM

Task Description: H/R UNCLOG FLOOR DRAIN

Unit of Measure: 1000 LINEAR FEET

Persons per Team: 1

Task Duration: 5.2000 hours

Trade: HEATING SYSTEM

Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.UNCLOG PLUGGED FLOOR DRAIN	4.000000

Material Resources

Description	Quantity	Unit Cost
SOLVENT	100 OZ.	0.2400
		24.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	63.150	84.200	105.250
2	28.200	37.600	47.000
3	19.800	26.400	33.000
4	18.600	24.800	31.000
5	16.200	21.600	27.000
6	15.000	20.000	25.000
7	13.200	17.600	22.000
8	12.450	16.600	20.750
9	11.550	15.400	19.250
10	10.800	14.400	18.000
11	10.950	14.600	18.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.000000	1.200000	5.200000
Material Cost \$	24.000000		24.000000
Equipment Hours			5.200000

Components In This Task: 0984130

TASK DATA FORM

Task Code: 0984132

Component: PIPE AND FITTINGS, PVC System: HEATING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: M/R UNCLOG MAIN DRAIN
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 1 Task Duration: 0.8190 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.UNCLOG MAIN DRAIN USING AUGER	0.630000	AUGER KIT	1	3.8400
				3.8400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	31.575	42.100	52.625
2	14.100	18.800	23.500
3	9.900	13.200	16.500
4	9.300	12.400	15.500
5	8.100	10.800	13.500
6	7.500	10.000	12.500
7	6.600	8.800	11.000
8	6.225	8.300	10.375
9	5.775	7.700	9.625
10	5.400	7.200	9.000
11	5.475	7.300	9.125

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.630000	0.189000	0.819000
Material	Cost \$	3.840000		3.840000
Equipment	Hours			0.819000

Components In This Task: 0984130

TASK DATA FORM

Task Code: 0984133

Component: PIPE AND FITTINGS, PVC System: HEATING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: REPLACE REPLACE PIPE AND FITTINGS
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 2 Task Duration: 120.9000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE OLD PIPE, INSTALL NEW	186.000000	PIPE	1000 FT.	7.5800
				7580.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	83.150	105.250	210.500
2	28.200	47.000	94.000
3	19.800	33.000	66.000
4	18.600	31.000	62.000
5	16.200	27.000	54.000
6	15.000	25.000	50.000
7	13.200	22.000	44.000
8	12.450	20.750	41.500
9	11.550	19.250	38.500
10	10.800	18.000	36.000
11	10.950	18.250	36.500

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	186.000000	55.800000	241.800000
Material	Cost \$	7580.000000		7580.000000
Equipment	Hours			120.900000

Components In This Task: 0984130

TASK DATA FORM

Task Code: 0984141Component: PIPE INSULATIONSystem: HEATING GENERATIONSubsystem: DIST. PIPING SYSTEMTask Description: M/R REPAIR BROKEN INSULATIONUnit of Measure: 1000 LINEAR FEETPersons per Team: 1 Task Duration: 0.3380 hoursTrade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE INSULATION	0.098000
2.MATERIAL HANDLING	0.012000
3.INSTALL INSULATION	0.138000
4.MATERIAL HANDLING	0.012000

Material Resources

Description	Quantity	Unit Cost
TAPE	4 FT	0.0400
INSULATION	2 FT	0.9000
		1.9600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	12.630	21.050	42.100
2	5.640	9.400	18.800
3	3.960	6.600	13.200
4	3.720	6.200	12.400
5	3.240	5.400	10.800
6	3.000	5.000	10.000
7	2.640	4.400	8.800
8	2.490	4.150	8.300
9	2.310	3.850	7.700
10	2.160	3.600	7.200
11	2.190	3.650	7.300

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.260000	0.078000	0.338000
Material Cost \$	1.960000		1.960000
Equipment Hours			0.338000

Components In This Task: 09843A0

TASK DATA FORM

Task Code: 0984142Component: PIPE INSULATIONSystem: HEATING GENERATIONSubsystem: DIST. PIPING SYSTEMTask Description: REPLACE REPLACE INSULATIONUnit of Measure: 1000 LINEAR FEETPersons per Team: 1 Task Duration: 91.0000 hoursTrade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/INSTALL INSULATION	70.000000

Material Resources

Description	Quantity	Unit Cost
INSULATION	1000 FT	0.9000
		900.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	42.100	126.300	210.500
2	18.800	56.400	94.000
3	13.200	39.600	66.000
4	12.400	37.200	62.000
5	10.800	32.400	54.000
6	10.000	30.000	50.000
7	8.800	26.400	44.000
8	8.300	24.900	41.500
9	7.700	23.100	38.500
10	7.200	21.600	36.000
11	7.300	21.900	36.500

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	70.000000	21.000000	91.000000
Material Cost \$	900.000000		900.000000
Equipment Hours			91.000000

Components In This Task: 09843A0

TASK DATA FORM

Task Code: 0984211

Component: GATE VALVE, 3/8" - 1 1/2" System: HEATING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: M/R REPACK GATE VALVE GLAND
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.5119 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1. TURN VALVE OFF AND ON	0.017000
2. REMOVE PACKING NUT	0.011000
3. REMOVE HANDWHEEL SCREW	0.009000
4. REMOVE HANDWHEEL	0.013000
5. REMOVE PACKING GLAND	0.023000
6. MEASURE AND CUT NEW PACKING	0.025000
7. REMOVE OLD PACKING	0.051000
8. INSTALL NEW PACKING	0.025000
9. INSTALL PACKING GLAND	0.013000
10. INSTALL HANDWHEEL	0.013000
11. INSTALL HANDWHEEL SCREW	0.900000
12. INSTALL PACKING NUT	0.011000
13. TEST ACTION OF VALVE	0.017000
14. MATERIAL HANDLING	0.035000

Material Resources

Description	Quantity	Unit Cost
PACKING	2 OZ	0.2100
		0.4200

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	37.700	56.550
2	8.100	16.200	24.300
3	6.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.163000	0.348900	1.511900
Material Cost \$	0.420000		0.420000
Equipment Hours			1.511900

Components In This Task: 0984210

TASK DATA FORM

Task Code: 0984212

Component: GATE VALVE, 3/8" - 1 1/2" System: HEATING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: REPLACE REPLACE GATE VALVE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.2600 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1. REMOVE/INSTALL VALVE	0.200000

Material Resources

Description	Quantity	Unit Cost
VALVE	1	16.9000
		16.9000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	75.400	113.100
2	16.200	32.400	48.600
3	12.000	24.000	36.000
4	11.100	22.200	33.300
5	9.400	18.800	28.200
6	10.000	20.000	30.000
7	7.700	15.400	23.100
8	7.700	15.400	23.100
9	6.800	13.600	20.400
10	6.000	12.000	18.000
11	6.000	12.000	18.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.200000	0.060000	0.260000
Material Cost \$	16.900000		16.900000
Equipment Hours			0.260000

Components In This Task: 0984210

TASK DATA FORM

Task Code: 0984221Component: GATE VALVE, 2" - 3"System: HEATING GENERATIONSubsystem: DIST. PIPING SYSTEMTask Description: M/R REPACK GATE VALVE GLANDUnit of Measure: COUNTPersons per Team: 1Task Duration: 0.3549 hoursTrade: HEATING SYSTEMTask Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1. TURN VALVE OFF AND ON	0.017000
2. REMOVE PACKING NUT	0.011000
3. REMOVE HANDWHEEL SCREW	0.009000
4. REMOVE HANDWHEEL	0.013000
5. REMOVE PACKING GLAND	0.023000
6. MEASURE AND CUT NEW PACKING	0.026000
7. REMOVE OLD PACKING	0.051000
8. INSTALL NEW PACKING	0.025000
9. INSTALL PACKING GLAND	0.013000
10. INSTALL HANDWHEEL	0.013000
11. INSTALL HANDWHEEL SCREW	0.009000
12. INSTALL PACKING UNIT	0.011000
13. TEST ACTION OF VALVE	0.017000
14. MATERIAL HANDLING	0.035000

Material Resources

Description	Quantity	Unit Cost
PACKING	4 OZ	0.2100
		0.8400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	37.700	56.550
2	8.100	16.200	24.300
3	6.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.273000	0.081900	0.354900
Material Cost \$	0.840000		0.840000
Equipment Hours			0.354900

Components In This Task: 0984220

TASK DATA FORM

Task Code: 0984222Component: GATE VALVE, 2" - 3"System: HEATING GENERATIONSubsystem: DIST. PIPING SYSTEMTask Description: REPLACE REPLACE GATE VALVEUnit of Measure: COUNTPersons per Team: 1Task Duration: 0.5720 hoursTrade: HEATING SYSTEMTask Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1. REPLACE VALVE WITH NEW	0.440000

Material Resources

Description	Quantity	Unit Cost
VALVE	1	88.7300
		88.7300

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	75.400	113.100
2	16.200	32.400	48.600
3	12.000	24.000	36.000
4	11.100	22.200	33.300
5	9.400	18.800	28.200
6	10.000	20.000	30.000
7	7.700	15.400	23.100
8	7.700	15.400	23.100
9	6.800	13.600	20.400
10	6.000	12.000	18.000
11	6.000	12.000	18.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.440000	0.132000	0.572000
Material Cost \$	88.730000		88.730000
Equipment Hours			0.572000

Components In This Task: 0984220

TASK DATA FORM

Task Code: 0984281

Component: DRAIN VALVE System: HEATING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: M/R REPACK DRAIN VALVE GLAND
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.3549 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.TURN VALVE OFF AND ON	0.017000	PACKING	1.5 OZ	0.2100
2.REMOVE PACKING NUT	0.011000			0.3150
3.REMOVE HANDWHEEL SCREW	0.009000			
4.REMOVE HANDWHEEL	0.013000			
5.REMOVE PACKING GLAND	0.023000			
6.MEASURE AND CUT NEW PACKING	0.026000			
7.REMOVE OLD PACKING	0.051000			
8.INSTALL NEW PACKING	0.025000			
9.INSTALL PACKING GLAND	0.013000			
10.INSTALL HANDWHEEL	0.013000			
11.INSTALL HANDWHEEL SCREW	0.009000			
12.INSTALL PACKING UNIT	0.011000			
13.TEST ACTION OF VALVE	0.017000			
14.MATERIAL HANDLING	0.035000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	7.540	11.310	18.850
2	3.240	4.860	8.100
3	2.400	3.600	6.000
4	2.220	3.330	5.550
5	1.880	2.820	4.700
6	2.000	3.000	5.000
7	1.540	2.310	3.850
8	1.540	2.310	3.850
9	1.360	2.040	3.400
10	1.200	1.800	3.000
11	1.200	1.800	3.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.273000	0.081900	0.354900
Material Cost \$	0.315000		0.315000
Equipment Hours			0.354900

Components In This Task: 0984280

TASK DATA FORM

Task Code: 0984282

Component: DRAIN VALVE System: HEATING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: M/R REPLACE VALVE STEM ASSEMBLY
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.0559 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.TURN VALVE OFF AND ON	0.017000	STEM ASSY.	1	5.5000
2.UNSCREW BONNET RING	0.011000			5.5000
3.REMOVE AND INSTALL ASSEMBLY	0.004000			
4.INSTALL BONNET RING	0.011000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	30.160	37.700
2	8.100	12.960	16.200
3	6.000	9.600	12.000
4	5.550	8.880	11.100
5	4.700	7.520	9.400
6	5.000	8.000	10.000
7	3.850	6.160	7.700
8	3.850	6.160	7.700
9	3.400	5.440	6.800
10	3.000	4.800	6.000
11	3.000	4.800	6.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.043000	0.012900	0.055900
Material Cost \$	5.500000		5.500000
Equipment Hours			0.055900

Components In This Task: 0984280

TASK DATA FORM

Task Code: 0984283

Component: DRAIN VALVE

System: HEATING GENERATION

Subsystem: DIST. PIPING SYSTEM

Task Description: REPLACE REPLACE DRAIN VALVE

Unit of Measure: COUNY

Persons per Team: 1 Task Duration: 0.6890 hours

Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE VALVE, INSTALL NEW	0.530000

Material Resources

Description	Quantity	Unit Cost
VALVE	1	16.9000
		16.9000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	56.550	75.400	94.250
2	24.300	32.400	40.500
3	18.000	24.000	30.000
4	16.650	22.200	27.750
5	14.100	18.800	23.500
6	15.000	20.000	25.000
7	11.550	15.400	19.250
8	11.550	15.400	19.250
9	10.200	13.600	17.000
10	9.000	12.000	15.000
11	9.000	12.000	15.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.530000	0.159000	0.689000
Material	Cost \$	16.900000		16.900000
Equipment	Hours			0.689000

Components In This Task: 0984280

TASK DATA FORM

Task Code: 0984291

Component: RADIATOR VALVE 1"

System: HEATING GENERATION

Subsystem: DIST. PIPING SYSTEM

Task Description: REPLACE REPLACE VALVE

Unit of Measure: COUNY

Persons per Team: 2 Task Duration: 0.7150 hours

Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REPLACE VALVE	1.100000

Material Resources

Description	Quantity	Unit Cost
VALVE	1	19.0800
		19.0800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	56.550	113.100
2	8.100	24.300	48.600
3	6.000	18.000	36.000
4	5.550	16.650	33.300
5	4.700	14.100	28.200
6	5.000	15.000	30.000
7	3.850	11.550	23.100
8	3.850	11.550	23.100
9	3.400	10.200	20.400
10	3.000	9.000	18.000
11	3.000	9.000	18.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	1.100000	0.330000	1.430000
Material	Cost \$	19.080000		19.080000
Equipment	Hours			0.715000

Components In This Task: 0984291

TASK DATA FORM

Task Code: 09842A1

Component: PRESSURE REDUCER VALVE 2" System: HEATING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: REPLACE REPLACE VALVE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 3.9000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1. REPLACE VALVE	6.000000

Material Resources

Description	Quantity	Unit Cost
VALVE	1	236.3500
		236.3500

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	7.540	22.620	37.700
2	3.240	9.720	16.200
3	2.400	7.200	12.000
4	2.220	6.660	11.100
5	1.880	5.640	9.400
6	2.000	6.000	10.000
7	1.540	4.620	7.700
8	1.540	4.620	7.700
9	1.360	4.080	6.800
10	1.200	3.600	6.000
11	1.200	3.600	6.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	6.000000	1.800000	7.800000
Material	Cost \$	236.350000		236.350000
Equipment	Hours			3.900000

Components In This Task: 0941310

TASK DATA FORM

Task Code: 0984371

Component: STEAM TRAP, F & T, <1" System: HEATING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: M/R REPAIR STEAM TRAP
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.5551 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1. TURN VALVE OFF AND ON	0.017000
2. REMOVE/INSTALL 6 SCREWS	0.105000
3. REMOVE SEAT/BALL ASSY & BELLOW	0.053000
4. CLEAN/SCRAPE/DERUST TRAP COVER	0.029000
5. ASSEMBLE SEAT/BALL ASSY.	0.028000
6. INSTALL SEAT/BALL ASSY & BELLOW	0.053000
7. REMOVE/INSTALL LOWER PLUG	0.021000
8. REMOVE/REPLACE STRAINER	0.025000
9. MATERIAL HANDLING	0.096000

Material Resources

Description	Quantity	Unit Cost
BALL ASSY	1	16.1200
		16.1200

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	3.770	11.310	18.850
2	1.620	4.860	8.100
3	1.200	3.600	6.000
4	1.110	3.330	5.550
5	0.940	2.820	4.700
6	1.000	3.000	5.000
7	0.770	2.310	3.850
8	0.770	2.310	3.850
9	0.680	2.040	3.400
10	0.600	1.800	3.000
11	0.600	1.800	3.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.427000	0.128100	0.555100
Material	Cost \$	16.120000		16.120000
Equipment	Hours			0.555100

Components In This Task: 0984370

TASK DATA FORM

Task Code: 0984372

Component: STEAM TRAP, F & T, <1" System: HEATING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: PH PREVENTIVE MAINTENANCE ON STEAM TRAP
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.CHECK FOR LEAKS	0.500000			0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.500000	0.150000	0.650000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			0.650000

Components In This Task: 0984370

TASK DATA FORM

Task Code: 0984373

Component: STEAM TRAP, F & T, <1" System: HEATING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: REPLACE REPLACE STEAM TRAP
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.3000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE OLD AND INSTALL NEW	1.000000	F & T TRAP	1	71.4200
				71.4200

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	37.700	56.550
2	8.100	16.200	24.300
3	6.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	1.000000	0.300000	1.300000
Material	Cost \$	71.420000		71.420000
Equipment	Hours			1.300000

Components In This Task: 0984370

TASK DATA FORM

Task Code: 09843A1

Component: PIPE INSULATION System: HEATING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: M/R REPAIR BROKEN INSULATION
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 1 Task Duration: 0.3380 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE INSULATION	0.098000	TAPE	4 FT	0.0400
2.MATERIAL HANDLING	0.012000	INSULATION	2 FT	0.9000
3.INSTALL INSULATION	0.138000			1.9600
4.MATERIAL HANDLING	0.012000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	11.310	18.850	37.700
2	4.860	8.100	16.200
3	3.600	6.000	12.000
4	3.330	5.550	11.100
5	2.820	4.700	9.400
6	3.000	5.000	10.000
7	2.310	3.850	7.700
8	2.310	3.850	7.700
9	2.040	3.400	6.800
10	1.800	3.000	6.000
11	1.800	3.000	6.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.260000	0.078000	0.338000
Material Cost \$	1.960000		1.960000
Equipment Hours			0.338000

Components In This Task: 09843A0

TASK DATA FORM

Task Code: 09843A2

Component: PIPE INSULATION System: HEATING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: REPLACE REPLACE INSULATION
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 1 Task Duration: 91.0000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/INSTALL INSULATION	70.000000	INSULATION	1000 FT	0.9000
				0.9000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	113.100	188.500
2	16.200	48.600	81.000
3	12.000	36.000	60.000
4	11.100	33.300	55.500
5	9.400	28.200	47.000
6	10.000	30.000	50.000
7	7.700	23.100	38.500
8	7.700	23.100	38.500
9	6.800	20.400	34.000
10	6.000	18.000	30.000
11	6.000	18.000	30.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	70.000000	21.000000	91.000000
Material Cost \$	700.000000		900.000000
Equipment Hours			91.000000

Components In This Task: 09843A0

TASK DATA FORM

Task Code: 0984411

Component: CIRCULATION PUMP, < 1 HP System: HEATING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: M/R REPAIR CIRCULATION PUMP
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6032 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1. LOOSEN COUPLING FROM PUMP SHAFT	0.009000
2. REMOVE 4 STUD BOLTS IN MOTOR	0.035000
3. REMOVE MOTOR	0.052000
4. REMOVE IMPELLER NUT FROM SHAFT	0.033000
5. REMOVE SEAL ASSEMBLY	0.019000
6. INSPECT BEARING BRACKETS FACE	0.005000
7. CLEAN BEARING	0.016000
8. INSPECT SHAFT	0.005000
9. CLEAN SHAFT	0.017000
10. INSTALL NEW SEAL AND RUBBER	0.013000
11. INSTALL SEAL SPRING AND WASHERS	0.006000
12. INSTALL IMPELLER NUT ON SHAFT	0.031000
13. CLEAN PUMP BODY GASKET AREA	0.037000
14. INSTALL NEW GASKET (READY MADE)	0.013000
15. INSTALL IMPELLER	0.009000
16. INSTALL 4 STUD BOLTS	0.035000
17. ASSEMBLE MOTOR TO BEARING	0.024000
18. INSTALL 4 STUD BOLTS	0.027000
19. TIGHTEN COUPLING	0.009000
20. FINAL TIGHTENING OF BOLTS	0.027000
21. TEST RUN	0.042000

Material Resources

Description	Quantity	Unit Cost
SEAL	2	0.7000
		1.4000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	7.540	18.850	37.700
2	3.240	8.100	16.200
3	2.400	6.000	12.000
4	2.220	5.550	11.100
5	1.880	4.700	9.400
6	2.000	5.000	10.000
7	1.540	3.850	7.700
8	1.540	3.850	7.700
9	1.360	3.400	6.800
10	1.200	3.000	6.000
11	1.200	3.000	6.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.484000	0.139200	0.603200
Material Cost \$	1.400000		1.400000
Equipment Hours			0.603200

Components In This Task: 0984410

TASK DATA FORM

Task Code: 0984412

Component: CIRCULATION PUMP, < 1 HP System: HEATING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: PM PREVENTIVE MAINTENANCE ON CIRCULATOR PUMP
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.1092 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1. CHECK FOR LEAKS	0.008000
2. CHECK PUMP OPERATION	0.009000
3. LUBRICATE PUMP AND MOTOR	0.036000
4. CHECK SUCTION OR DISCHARGE PRES	0.003000
5. CHECK PACKING GLANDS, TIGHTEN	0.011000
6. FILL OUT INSPECTION REPORT	0.017000

Material Resources

Description	Quantity	Unit Cost
LUBRICANT	2 OZ	0.1300
		0.2600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.084000	0.025200	0.109200
Material Cost \$	0.260000		0.260000
Equipment Hours			0.109200

Components In This Task: 0984410

TASK DATA FORM

Task Code: 0984413

Component: CIRCULATION PUMP, < 1 HP System: HEATING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: REPLACE REPLACE CIRCULATOR PUMP
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 4.1990 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE PUMP, INSTALL NEW	3.230000	PUMP	1	350.0000
				350.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	56.550	75.400
2	16.200	24.300	32.400
3	12.000	18.000	24.000
4	11.100	16.650	22.200
5	9.400	14.100	18.800
6	10.000	15.000	20.000
7	7.700	11.550	15.400
8	7.700	11.550	15.400
9	6.800	10.200	13.600
10	6.000	9.000	12.000
11	6.000	9.000	12.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.230000	0.969000	4.199000
Material Cost \$	350.000000		350.000000
Equipment Hours			4.199000

Components In This Task: 0984410

TASK DATA FORM

Task Code: 0984421

Component: CIRCULATION PUMP 5 HP System: HEATING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: M/R REPAIR CIRCULATION PUMP
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6032 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.LOOSEN COUPLING FROM PUMP SHAFT	0.009000	SEAL	2 UNITS	16.4100
2.REMOVE 4 STUD BOLTS IN MOTOR	0.035000			32.8200
3.REMOVE MOTOR	0.052000			
4.REMOVE IMPELLAR NUT FROM SHAFT	0.033000			
5.REMOVE SEAL ASSEMBLY	0.019000			
6.INSEPT BEARING BRACKETS FACE	0.005000			
7.CLEAN BEARING	0.016000			
8.INSPECT SHAFT	0.005000			
9.CLEAN SHAFT	0.017000			
10.INSTALL NEW SEAL AND RUBBER	0.013000			
11.INSTALL SEAL SPRING AND WASHERS	0.006000			
12.INSTALL IMPELLAR NUT ON SHAFT	0.031000			
13.CLEAN PUMP BODY GASKET AREA	0.037000			
14.INSTALL NEW GASKET (READY MADE)	0.013000			
15.INSTALL IMPELLAR	0.009000			
16.INSTALL 4 STUD BOLTS	0.035000			
17.ASSEMBLE MOTOR TO BEARING	0.024000			
18.INSTALL 4 STUD BOLTS	0.027000			
19.TIGHTEN COUPLING	0.009000			
20.FINAL TIGHTING OF BOLTS	0.027000			
21.TEST RUN	0.042000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	7.540	18.850	37.700
2	3.240	8.100	16.200
3	2.400	6.000	12.000
4	2.220	5.550	11.100
5	1.880	4.700	9.400
6	2.000	5.000	10.000
7	1.540	3.850	7.700
8	1.540	3.850	7.700
9	1.360	3.400	6.800
10	1.200	3.000	6.000
11	1.200	3.000	6.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.464000	0.139200	0.603200
Material Cost \$	32.820000		32.820000
Equipment Hours			0.603200

Components In This Task:

TASK DATA FORM

Task Code: 0984422

Component: CIRCULATION PUMP 5 HP System: HEATING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: PM PREVENTIVE MAINTANENCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.1092 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.CHECK FOR LEAKS	0.008000	LUBRICANT	2 OZ	0.1300
2.CHECK PUMP OPERATION	0.009000			0.2600
3.LUBRICATE PUMP AND MOTOR	0.036000			
4.CHECK SUCTION OR DISCHARGE PRES	0.003000			
5.CHECK PACKING GLANDS, TIGHTEN	0.011000			
6.FILL OUT INSPECTION REPORT	0.017000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.084000	0.025200	0.109200
Material	Cost \$	0.260000		0.260000
Equipment	Hours			0.109200

Components In This Task: _____

TASK DATA FORM

Task Code: 0984423

Component: CIRCULATION PUMP 5 HP System: HEATING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: REPLACE REPLACE PUMP
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.0995 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE PUMP, INSTALL NEW	3.230000	PUMP	1 UNIT	1200.0000
				1200.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	56.550	75.400
2	16.200	24.300	32.400
3	12.000	18.000	24.000
4	11.100	16.650	22.200
5	9.400	14.100	18.800
6	10.000	15.000	20.000
7	7.700	11.550	15.400
8	7.700	11.550	15.400
9	6.800	10.200	13.600
10	6.000	9.000	12.000
11	6.000	9.000	12.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	3.230000	0.969000	4.199000
Material	Cost \$	1200.000000		1200.000000
Equipment	Hours			2.099500

Components In This Task: _____

TASK DATA FORM

Task Code: 0984461

Component: COND. RCVR. 10 - 15 GAL. System: HEATING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: M/R REPAIR CONDENSATE RECEIVER
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 2.0475 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1. TURN POWER OFF AND ON	0.004000
2. CLOSE AND OPEN VALVES	0.034000
3. REMOVE AND INSTALL DRAIN PLUG	0.022000
4. SECURE WATER LINES IN POSITION	0.036000
5. REMOVE AND INSTALL STRAINER	0.174000
6. REMOVE/INSTALL SHOCK ABSORBER	0.174000
7. REMOVE/INSTALL BOLTS IN HOUSING	0.178000
8. REMOVE/INSTALL HOUSING & GASKET	0.146000
9. REMOVE/INSTALL MOUNTING BOLTS	0.087000
10. LOOSEN/TIGHTEN COUPLING SCREWS	0.027000
11. REMOVE AND INSTALL COUPLING	0.046000
12. REMOVE/INSTALL IMPELLER NUT	0.022000
13. REMOVE AND INSTALL IMPELLER	0.049000
14. REMOVE AND INSTALL SEALS	0.092000
15. REMOVE/INSTALL BEARING BOLTS	0.131000
16. REMOVE/INSTALL SHAFT BEARINGS	0.146000
17. MATERIAL HANDLING	0.207000

Material Resources

Description	Quantity	Unit Cost
SEALS	4	2.5000
BEARINGS	2	8.5000
		27.0000

Zone	FREQUENCY OF OCCURRENCE			Low
	High	Average		
1	3.770	11.310		18.850
2	1.620	4.860		8.100
3	1.200	3.600		6.000
4	1.110	3.330		5.550
5	0.940	2.820		4.700
6	1.000	3.000		5.000
7	0.770	2.310		3.850
8	0.770	2.310		3.850
9	0.680	2.040		3.400
10	0.600	1.800		3.000
11	0.600	1.800		3.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.575000	0.472500	2.047500
Material Cost \$	27.000000		27.000000
Equipment Hours			2.047500

Components In This Task: 0984460

TASK DATA FORM

Task Code: 0984462

Component: COND. RCVR. 10 - 15 GAL. System: HEATING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: M/R REPAIR CONDENSATE RECEIVER, MOTOR
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6487 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1. REMOVE AND INSTALL SCREW	0.071000
2. REMOVE AND INSTALL PANEL	0.026000
3. PLUG AND UNPLUG UNIT	0.026000
4. REMOVE AND INSTALL BASE BOLTS	0.087000
5. REMOVE AND INSTALL MOTOR	0.018000
6. CHECK OPERATION OF MOTOR	0.167000
7. MATERIAL HANDLING	0.104000

Material Resources

Description	Quantity	Unit Cost
MOTOR	1	8.0200
		8.0200

Zone	FREQUENCY OF OCCURRENCE			Low
	High	Average		
1	7.540	18.850		37.700
2	3.240	8.100		16.200
3	2.400	6.000		12.000
4	2.220	5.550		11.100
5	1.880	4.700		9.400
6	2.000	5.000		10.000
7	1.540	3.850		7.700
8	1.540	3.850		7.700
9	1.360	3.400		6.800
10	1.200	3.000		6.000
11	1.200	3.000		6.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.499000	0.149700	0.648700
Material Cost \$	8.020000		8.020000
Equipment Hours			0.648700

Components In This Task: 0984460

TASK DATA FORM

Task Code: 0984463

Component: COND. RCVR., 10 - 15 GAL. System: HEATING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: PM PREVENTIVE MAINTENANCE ON CONDENSATE RECEIVER
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.3000 hours
 Trade: HEATING SYSTEM Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.CHECK OPERATION AND LEAKS	1.000000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.000000	0.300000	1.300000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.300000

Components In This Task: 0984460

TASK DATA FORM

Task Code: 0984464

Component: COND. RCVR., 10 - 15 GAL. System: HEATING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: REPLACE REPLACE CONDENSATE RECEIVER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 7.8000 hours
 Trade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE OLD AND INSTALL NEW RCVR	12.000000

Material Resources

Description	Quantity	Unit Cost
RECEIVER	1	1800.0000
		1800.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	75.400	113.100
2	16.200	32.400	48.600
3	12.000	24.000	36.000
4	11.100	22.200	33.300
5	9.400	18.800	28.200
6	10.000	20.000	30.000
7	7.700	15.400	23.100
8	7.700	15.400	23.100
9	6.800	13.600	20.400
10	6.000	12.000	18.000
11	6.000	12.000	18.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	12.000000	3.600000	15.600000
Material Cost \$	1800.000000		1800.000000
Equipment Hours			7.800000

Components In This Task: 0984460

TASK DATA FORM

Task Code: 0991111

Component: A/C DX PACKAGE 5T

System: COOLING GENERATION

Subsystem: EQUIPMENT

Task Description: M/R REPAIR AIR CONDITIONER

Unit of Measure: COUNT

Persons per Team: 1 Task Duration: 20.8000 hours

Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR CONTROLS	0.600000
2.REMOVE/REPLACE SUPPLY FAN	0.500000
3.REM./REPL. SUPPLY FAN BEARING	1.200000
4.REM./REPLACE SUPPLY FAN MOTOR	1.800000
5.REM./REPL.COMPRESSOR	5.800000
6.REM./REPL. CONDENSER FAN	1.800000
7.REM./REPL. CONDENSER FAN BEAR.	1.200000
8.REM./REPL. CONDENSER FAN MOTOR	1.800000
9.REPLACE REFRIGERANT	0.800000
10.REMOVE/REPLACE HEATER	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN MOTOR	1	82.8300
CONDENSER	1	65.9700
REFRIGERANT	10 LBS.	1.6700
HEATER	1	630.0000
COMPRESSOR	1	1650.0000
		2445.5000

FREQUENCY OF OCCURRENCE

Zone	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	16.000000	4.800000	20.800000
Material	Cost \$	2445.500000		2445.500000
Equipment	Hours			20.800000

Components In This Task: 0991110

TASK DATA FORM

Task Code: 0991112

Component: A/C DX PACKAGE 5T

System: COOLING GENERATION

Subsystem: EQUIPMENT

Task Description: PM PREVENTIVE MAINTENANCE

Unit of Measure: COUNT

Persons per Team: 1 Task Duration: 3.6400 hours

Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	1.400000
2.RECURRING MAINTENANCE	0.700000
3.SEASONAL SHUTDOWN	0.700000

Material Resources

Description	Quantity	Unit Cost
		0.0000

FREQUENCY OF OCCURRENCE

Zone	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	2.800000	0.840000	3.640000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			3.640000

Components In This Task: 0991110

TASK DATA FORM

Task Code: 0991113Component: A/C DX PACKAGE 5TSystem: COOLING GENERATIONSubsystem: EQUIPMENTTask Description: REPLACE REPLACE AIR CONDITONERUnit of Measure: COUNTPersons per Team: 2Task Duration: 4.1925 hoursTrade: REFRIG./AIR COND.Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE AIR CONDITIONER	6.450000

Material Resources

Description	Quantity	Unit Cost
A/C UNIT	1	1750.0000
		1750.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	6.450000	1.935000	8.385000
Material Cost \$	1750.000000		1750.000000
Equipment Hours			4.192500

Components In This Task: 0991110

TASK DATA FORM

Task Code: 0991121Component: A/C DX PACKAGE 20TSystem: COOLING GENERATIONSubsystem: EQUIPMENTTask Description: M/R REPAIR AIR CONDITIONERUnit of Measure: COUNTPersons per Team: 1Task Duration: 20.8000 hoursTrade: REFRIG./AIR COND.Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR CONTROLS	0.600000
2.REMOVE/REPLACE SUPPLY FAN	0.500000
3.REM./REPL. SUPPLY FAN BEARING	1.200000
4.REM./REPL. SUPPLY FAN MOTOR	1.800000
5.REMOVE/REPLACE COMPRESSOR	5.800000
6.REMOVE/REPLACE CONDENSER FAN	1.800000
7.REM./REPL. CONDENSER FAN BEAR.	1.200000
8.REM./REPL. CONDENSER FAN MOTOR	1.800000
9.REPLACEMENT REFRIGERANT	0.800000
10.REMOVE/REPLACE HEATER	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN MOTOR	1	82.8300
CONDENSER	1	65.9700
REFRIGERANT	25 LBS.	1.6700
HEATER	1	3937.5000
COMPRESSOR	1	4380.0000
		8508.0500

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	16.000000	4.800000	20.800000
Material Cost \$	8508.050000		8508.050000
Equipment Hours			20.800000

Components In This Task: 0991120

TASK DATA FORM

Task Code: 0991122

Component: A/C DX PACKAGE 20T

System: COOLING GENERATION

Subsystem: EQUIPMENT

Task Description: PM PREVENTIVE MAINTENANCE

Unit of Measure: COUNT

Persons per Team: 1 Task Duration: 9.2300 hours

Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	5.200000
2.RECURRING MAINTENANCE	1.200000
3.SEASONAL SHUTDOWN	0.700000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	7.100000	2.130000	9.230000
Material Cost \$	0.000000		0.000000
Equipment Hours			9.230000

Components In This Task: 0991120

TASK DATA FORM

Task Code: 0991123

Component: A/C DX PACKAGE 20T

System: COOLING GENERATION

Subsystem: EQUIPMENT

Task Description: REPLACE REPLACE AIR CONDITIONER

Unit of Measure: COUNT

Persons per Team: 3 Task Duration: 6.8033 hours

Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE AIR CONDITIONER	15.700000

Material Resources

Description	Quantity	Unit Cost
A/C UNIT	1	7500.0000
		7500.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	15.700000	4.710000	20.410000
Material Cost \$	7500.000000		7500.000000
Equipment Hours			6.803333

Components In This Task: 0991120

TASK DATA FORM

Task Code: 0991131Component: A/C DX PACKAGE 50TSystem: COOLING GENERATIONSubsystem: EQUIPMENTTask Description: M/R REPAIR AIR CONDITIONERUnit of Measure: COUNTPersons per Team: 1 Task Duration: 23.4000 hoursTrade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR CONTROLS	0.600000
2.REMOVE/REPLACE SUPPLY FAN	0.500000
3.REMOVE/REPLACE SUPPLY FAN BRG.	1.200000
4.REM./REPL. SUPPLY FAN MOTOR	1.800000
5.REMOVE/REPLACE COMPRESSOR	5.800000
6.REMOVE/REPLACE CONDENSER FAN	1.800000
7.REM./REPL. CONDENSER FAN BRG.	1.200000
8.REM./REPL. CONDENSER FAN MOTOR	1.800000
9.REPLACE REFRIGERANT	0.800000
10.REMOVE/REPLACE HEATER	0.500000
11.REMOVE/REPLACE HUMIDIFIER	2.000000

Material Resources

Description	Quantity	Unit Cost
FAN MOTOR	1	478.9100
REFRIGERANT	50 LBS	1.6700
HEATER	2	4725.0000
HUMIDIFIER	1	2100.0000
COMPRESSOR	1	13600.0000
		<u>25712.4100</u>

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	18.000000	5.400000	23.400000
Material Cost \$	25712.410000		25712.410000
Equipment Hours			23.400000

Components In This Task: 0991130

TASK DATA FORM

Task Code: 0991132Component: A/C DX PACKAGE 50TSystem: COOLING GENERATIONSubsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 1 Task Duration: 11.8300 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	7.200000
2.RECURRING MAINTENANCE	1.200000
3.SEASONAL SHUTDOWN	0.700000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	9.100000	2.730000	11.830000
Material Cost \$	0.000000		0.000000
Equipment Hours			11.830000

Components In This Task: 0991130

TASK DATA FORM

Task Code: 0991133

Component: A/C DX PACKAGE 50T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE AIR CONDITIONER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 11.9275 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE AIR CONDITIONER	36.700000	A/C UNIT	1	20000.0000
				20000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	36.700000	11.010000	47.710000
Material Cost \$	20000.000000		20000.000000
Equipment Hours			11.927500

Components In This Task: 0991130

TASK DATA FORM

Task Code: 0991211

Component: A/C WINDOW 1T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR AIR CONDITIONER
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.3000 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE CHARGE	1.000000	REFRIGERANT	1 LB.	1.6700
				1.6700

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	3.520	7.040	10.560
2	3.840	7.680	11.520
3	6.080	12.160	18.240
4	5.920	11.840	17.760
5	7.840	15.680	23.520
6	4.000	8.000	12.000
7	12.840	25.680	38.520
8	18.560	37.120	55.680
9	18.240	36.480	54.720
10	23.400	46.800	70.200
11	76.920	153.840	230.760

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.000000	0.300000	1.300000
Material Cost \$	1.670000		1.670000
Equipment Hours			1.300000

Components In This Task: 0991210

TASK DATA FORM

Task Code: 0991212

Component: A/C WINDOW 1T

System: COOLING GENERATION

Subsystem: EQUIPMENT

Task Description: PM PREVENTIVE MAINTENANCE

Unit of Measure: COUNT

Persons per Team: 1 Task Duration: 1.6900 hours

Trade: REFRIG./AIR COND. Task Classification: G

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	0.900000
2.RECURRING MAINTENANCE	0.200000
3.SEASONAL SHUTDOWN	0.200000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.300000	0.390000	1.690000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.690000

Components In This Task: 0991210

TASK DATA FORM

Task Code: 0991213

Component: A/C WINDOW 1T

System: COOLING GENERATION

Subsystem: EQUIPMENT

Task Description: REPLACE REPLACE AIR CONDITIONER

Unit of Measure: COUNT

Persons per Team: 1 Task Duration: 5.9800 hours

Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE AIR CONDITIONER	4.600000

Material Resources

Description	Quantity	Unit Cost
A/C UNIT	1	500.0000
		500.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.600000	1.380000	5.980000
Material Cost \$	500.000000		500.000000
Equipment Hours			5.980000

Components In This Task: 0991210

TASK DATA FORM

Task Code: 0991221

Component: A/C WINDOW 2T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR AIR CONDITIONER
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.3000 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE CHARGE	1.000000	REFRIGERANT	1 LB.	1.6700 1.6700

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	3.520	7.040	10.560
2	3.840	7.680	11.520
3	6.080	12.160	18.240
4	5.920	11.840	17.760
5	7.840	15.680	23.520
6	4.000	8.000	12.000
7	12.840	25.680	38.520
8	18.560	37.120	55.680
9	18.240	36.480	54.720
10	23.400	46.800	70.200
11	76.920	153.840	230.760

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.000000	0.300000	1.300000
Material Cost \$	1.670000		1.670000
Equipment Hours			1.300000

Components In This Task: 0991220

TASK DATA FORM

Task Code: 0991222

Component: A/C WINDOW 2T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.6900 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	0.900000			0.0000
2.RECURRING MAINTENANCE	0.200000			
3.SEASONAL SHUTDOWNS	0.200000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.300000	0.390000	1.690000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.690000

Components In This Task: 0991220

TASK DATA FORM

Task Code: 0991223

Component: A/C WINDOW 2T

System: COOLING GENERATION

Subsystem: EQUIPMENT

Task Description: REPLACE REPLACE AIR CONDITONER

Unit of Measure: COUNT

Persons per Team: 1 Task Duration: 6.5000 hours

Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE AIR CONDITIONER	5.000000

Material Resources

Description	Quantity	Unit Cost
A/C UNIT	1	700.0000
		700.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	5.000000	1.500000	6.500000
Material Cost \$	700.000000		700.000000
Equipment Hours			6.500000

Components In This Task: 0991220

TASK DATA FORM

Task Code: 0991311

Component: A/C PAD MTD. 4T

System: COOLING GENERATION

Subsystem: EQUIPMENT

Task Description: M/R REPAIR AIR CONDITIONER

Unit of Measure: COUNT

Persons per Team: 1 Task Duration: 1.3000 hours

Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE CHARGE	1.000000

Material Resources

Description	Quantity	Unit Cost
REFRIGERANT	5 LBS.	1.6700
		8.3500

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	3.520	7.040	10.560
2	3.840	7.680	11.520
3	6.080	12.160	18.240
4	5.920	11.840	17.760
5	7.840	15.680	23.520
6	4.000	8.000	12.000
7	12.840	25.680	38.520
8	18.560	37.120	55.680
9	18.240	36.480	54.720
10	23.400	46.800	70.200
11	76.920	153.840	230.760

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.000000	0.300000	1.300000
Material Cost \$	8.350000		8.350000
Equipment Hours			1.300000

Components In This Task: 0991310

TASK DATA FORM

Task Code: 0991312

Component: A/C PAD MTD. 4T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 4.9400 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	3.400000			0.0000
2.RECURRING MAINTENANCE	0.200000			
3.SEASONAL SHUTDOWN	0.200000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.800000	1.140000	4.940000
Material Cost \$	0.000000		0.000000
Equipment hours			4.940000

Components In This Task: 0991310

TASK DATA FORM

Task Code: 0991313

Component: A/C PAD MTD. 4T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE AIR CONDITIONER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 3.2500 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE AIR CONDITIONER	5.000000	A/C UNIT	1	1400.0000
				1400.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	5.000000	1.500000	6.500000
Material Cost \$	1400.000000		1400.000000
Equipment Hours			3.250000

Components In This Task: 0991310

TASK DATA FORM

Task Code: 0991321

Component: A/C PAD MOUNTED 20 TON System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR AIR CONDITIONER
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 20.8000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR CONTROLS	0.600000
2.REMOVE/REPLACE SUPPLY FAN	0.500000
3.REM./REPL. SUPPLY FAN BEARING	1.200000
4.REM./REPL. SUPPLY FAN MOTOR	1.800000
5.REMOVE/REPLACE COMPRESSOR	5.800000
6.REMOVE/REPLACE CONDENSOR FAN	1.800000
7.REM./REPL. CONDENSOR FAN BEAR.	1.200000
8.REM./REPL. CONDENSOR FAN MOTOR	1.800000
9.REPLACEMENT REFRIGERANT	0.800000
10.REMOVE/REPLACE HEATER	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN MOTOR	1	82.8300
CONDENSOR	1	65.9700
REFRIGENANT	25 LBS.	1.6700
HEATER	1	3937.5000
COMPRESSOR	1	4380.0000
		8508.0500

FREQUENCY OF OCCURRENCE

Zone	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	16.000000	4.800000	20.800000
Material Cost \$	8508.050000		8508.050000
Equipment Hours			20.800000

Components In This Task:

TASK DATA FORM

Task Code: 0991322

Component: A/C PAD MOUNTED 20 TON System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 9.2300 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	5.200000
2.RECURRING MAINTENANCE	1.200000
3.SEASONAL SHUTDOWN	0.700000

Material Resources

Description	Quantity	Unit Cost
		0.0000

FREQUENCY OF OCCURRENCE

Zone	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	7.100000	2.130000	9.230000
Material Cost \$	0.000000		0.000000
Equipment Hours			9.230000

Components In This Task: 0991320

TASK DATA FORM

Task Code: 0991323

Component: A/C PAD MOUNTED 20 TON

System: COOLING GENERATION

Subsystem: EQUIPMENT

Task Description: REPLACE REMOVE /REPLACE AIR CONDITIONER

Unit of Measure: COUNT

Persons per Team: 3 Task Duration: 6.8033 hours

Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE AIR CONDITIONER	15.700000

Material Resources

Description	Quantity	Unit Cost
A/C UNIT	1	7500.0000
		7500.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	75.400	113.100
2	16.200	32.400	48.600
3	12.000	24.000	36.000
4	11.100	22.200	33.300
5	9.400	18.800	28.200
6	10.000	20.000	30.000
7	7.700	15.400	23.100
8	7.700	15.400	23.100
9	6.800	13.600	20.400
10	6.000	12.000	18.000
11	6.000	12.000	18.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	15.700000	4.710000	20.410000
Material Cost \$	7500.000000		7500.000000
Equipment Hours			6.803333

Components In This Task:

TASK DATA FORM

Task Code: 0991411

Component: CHILLER-AIR COOL RECIP.20T

System: COOLING GENERATION

Subsystem: EQUIPMENT

Task Description: M/R REPAIR HERMETIC CHILLER

Unit of Measure: COUNT

Persons per Team: 2 Task Duration: 9.9450 hours

Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR CONTROLS	0.500000
2.REMOVE/REPLACE FAN BRG. (3)	3.600000
3.REMOVE/REPLACE FAN MOTOR (3)	5.400000
4.REMOVE/REPLACE COMPRESSOR	5.800000

Material Resources

Description	Quantity	Unit Cost
FAN MOTOR	3	150.0000
COMPRESSOR	1	4380.0000
		4830.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	15.300000	4.590000	19.890000
Material Cost \$	4830.000000		4830.000000
Equipment Hours			9.945000

Components In This Task: 0991410

TASK DATA FORM

Task Code: 0991412

Component: CHILLER-AIR COOL RECIP.20T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 11.2450 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	16.000000
2.RECURRING MAINTENANCE	0.800000
3.SEASONAL SHUTDOWN	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	17.300000	5.190000	22.490000
Material Cost \$	0.000000		0.000000
Equipment Hours			11.245000

Components In This Task: 0991410

TASK DATA FORM

Task Code: 0991413

Component: CHILLER-AIR COOL RECIP.20T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE CHILLER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 7.1500 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE CHILLER	22.000000

Material Resources

Description	Quantity	Unit Cost
CHILLER	1	10150.0000
		10150.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	22.000000	6.600000	28.600000
Material Cost \$	10150.000000		10150.000000
Equipment Hours			7.150000

Components In This Task: 0991410

TASK DATA FORM

Task Code: 0991421

Component: CHILLER AIR COOL REC.50T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR HERMETIC CHILLER
 Unit of Measure: COUNT
 Persons per Team: 5 Task Duration: 8.1900 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR CONTROLS	0.500000
2.REMOVE/REPLACE FANS BRG. (3)	3.600000
3.REMOVE/REPLACE FANS (MOTOR (3)	5.400000
4.REMOVE/REPLACE COMPRESSORS (2)	5.800000
5.REM./REPL. COMPRESSOR MOTOR (2)	3.600000

Material Resources

Description	Quantity	Unit Cost
FAN MOTOR	3	150.0000
COMPRESSOR	2	5150.0000
		10750.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	18.900000	5.670000	24.570000
Material Cost \$	10750.000000		10750.000000
Equipment Hours			8.190000

Components In This Task: 0991420

TASK DATA FORM

Task Code: 0991422

Component: CHILLER AIR COOL REC.50T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 13.9750 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	20.000000
2.RECURRING MAINTENANCE	1.000000
3.SEASONAL SHUTDOWNS	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	21.500000	6.450000	27.950000
Material Cost \$	0.000000		0.000000
Equipment Hours			13.975000

Components In This Task: 0991420

TASK DATA FORM

Task Code: 0991423

Component: CHILLER AIR COOL REC.50T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE CHILLER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 10.0750 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE CHILLER	31.000000	CHILLER	1	18000.0000
				18000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	31.000000	9.300000	40.300000
Material Cost \$	18000.000000		18000.000000
Equipment Hours			10.075000

Components In This Task: 0991420

TASK DATA FORM

Task Code: 0991431

Component: CHILLER AIR COOL REC.100T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR HERMETIC CHILLER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 6.1425 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	FAN MOTOR	3	150.0000
2.REMOVE/REPLACE FAN BR6(3)	3.600000	COMPRESSOR	2	13600.0000
3.REMOVE/REPLACE FAN MOTOR (3)	5.400000			27650.0000
4.REMOVE/REPLACE COMPRESSOR (2)	5.800000			
5.REMOVE/REPLACE COMP. MOTOR (2)	3.600000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	18.900000	5.670000	24.570000
Material Cost \$	27650.000000		27650.000000
Equipment Hours			6.142500

Components In This Task: 0991430

TASK DATA FORM

Task Code: 0991432

Component: CHILLER AIR COOL REC.100T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 13.9750 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	20.000000			0.0000
2.RECURRING MAINTENANCE	1.000000			
3.SEASONAL SHUTDOWNS	0.500000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	21.500000	6.450000	27.950000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			13.975000

Components In This Task: 0991430

TASK DATA FORM

Task Code: 0991433

Component: CHILLER AIR COOL REC.100T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE CHILLER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 18.2000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE CHILLER	56.000000	CHILLER	1	38000.0000
				38000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	56.000000	16.800000	72.800000
Material	Cost \$	38000.000000		38000.000000
Equipment	Hours			18.200000

Components In This Task: 0991430

TASK DATA FORM

Task Code: 0991441

Component: CHILLER-AIR COOL RECIP. 5T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR HERMETIC CHILLER
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 19.8900 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	FAN MOTOR	2	120.0000
2.REMOVE/REPLACE FAN BRG. (2)	3.600000	COMPRESSOR	1	1650.0000
3.REMOVE/REPLACE FAN MOTOR (2)	5.400000			1890.0000
4.REMOVE/REPLACE COMPRESSOR	5.800000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	15.300000	4.590000	19.890000
Material Cost \$	1890.000000		1890.000000
Equipment Hours			19.890000

Components In This Task: 0991440

TASK DATA FORM

Task Code: 0991442

Component: CHILLER-AIR COOL RECIP. 5T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 12.0900 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	8.000000			0.0000
2.RECURRING MAINTENANCE	0.800000			
3.SEASONAL SHUTDOWN	0.500000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	9.300000	2.790000	12.090000
Material Cost \$	0.000000		0.000000
Equipment Hours			12.090000

Components In This Task: 0991440

TASK DATA FORM

Task Code: 0991443

Component: CHILLER-AIR COOL RECIP. 5T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLA REPAIR CHILLER
 Unit of Measure: COUNT
 Persons per Team: 5 Task Duration: 5.2000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE CHILLER	12.000000

Material Resources

Description	Quantity	Unit Cost
CHILLER	1	3500.0000
		3500.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	12.000000	3.800000	15.800000
Material Cost \$	3500.000000		3500.000000
Equipment Hours			5.200000

Components In This Task: 0991440

TASK DATA FORM

Task Code: 0991451

Component: CHILLER AIR COOL REC. 10T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR HERMETIC CHILLER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 12.2850 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR CONTROLS	0.500000
2.REMOVE/REPLACE FANS BRG. (3)	3.600000
3.REMOVE/REPLACE FANS MOTOR (3)	5.400000
4.REMOVE/REPLACE COMPRESSORS (2)	5.800000
5.REM/REPL COMPRESSOR MOTOR (2)	3.600000

Material Resources

Description	Quantity	Unit Cost
FAN MOTOR	3	120.0000
COMPRESSOR	2	1650.0000
		3660.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	18.900000	5.670000	24.570000
Material Cost \$	3660.000000		3660.000000
Equipment Hours			12.285000

Components In This Task: 0991450

TASK DATA FORM

Task Code: 0991452

Component: CHILLER AIR COOL REC. 10T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 8.7750 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	12.000000			0.0000
2.RECURRING MAINTENANCE	1.000000			
3.SEASONAL SHUTDOWNS	0.500000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	13.500000	4.050000	17.550000
Material Cost \$	0.000000		0.000000
Equipment Hours			8.775000

Components In This Task: 0991450

TASK DATA FORM

Task Code: 0991453

Component: CHILLER AIR COOL REC. 10T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE CHILLER
 Unit of Measure: COUNT
 Persons per Team: 3 Task Duration: 6.9333 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE CHILLER	16.000000	CHILLER	1	6000.0000
				6000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	16.000000	4.800000	20.800000
Material Cost \$	6000.000000		6000.000000
Equipment Hours			6.933333

Components In This Task: 0991450

TASK DATA FORM

Task Code: 0991461Component: CHILLER AIR COOL REC. 15T System: COOLING GENERATIONSubsystem: EQUIPMENTTask Description: M/R REPAIR HERMETIC CHILLERUnit of Measure: COUNTPersons per Team: 2 Task Duration: 12.2850 hoursTrade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR CONTROLS	0.500000
2.REMOVE/REPLACE FAN BR6 (3)	3.600000
3.REMOVE/REPLACE FAN MOTOR (3)	5.400000
4.REMOVE/REPLACE COMPRESSOR (2)	5.800000
5.REMOVE/REPLACE COMP. MOTOR (2)	3.600000

Material Resources

Description	Quantity	Unit Cost
FAN MOTOR	3	185.0000
COMPRESSOR	2	4000.0000
		8555.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	18.900000	5.670000	24.570000
Material	Cost \$	8555.000000		8555.000000
Equipment	Hours			12.285000

Components In This Task: 0991460

TASK DATA FORM

Task Code: 0991462Component: CHILLER AIR COOL REC. 15T System: COOLING GENERATIONSubsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 2 Task Duration: 11.3750 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	16.000000
2.RECURRING MAINTENANCE	1.000000
3.SEASONAL SHUTDOWNS	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	17.500000	5.250000	22.750000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			11.375000

Components In This Task: 0991460

TASK DATA FORM

Task Code: 0991463

Component: CHILLER AIR COOL REC. 15T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE CHILLER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 7.1500 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE CHILLER	22.000000

Material Resources

Description	Quantity	Unit Cost
CHILLER	1	7800.0000
		7800.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	22.000000	6.600000	28.600000
Material Cost \$	7800.000000		7800.000000
Equipment Hours			7.150000

Components In This Task: 0991460

TASK DATA FORM

Task Code: 0991511

Component: CHILLER WAT.COOL REC.20T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR HERMETIC CHILLER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 5.2650 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR CONTROLS	0.500000
2.REMOVE/REPLACE COMPRESSOR	5.800000
3.REM./REPLACE EVAPORATOR TUBE	0.900000
4.REMOVE/REPLACE CONDENSER TUBE	0.900000

Material Resources

Description	Quantity	Unit Cost
COMPRESSOR	1	4308.0000
EVAP. TUBE	1	100.0000
COND. TUBE	1	100.0000
		4508.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	8.100000	2.430000	10.530000
Material Cost \$	4508.000000		4508.000000
Equipment Hours			5.265000

Components In This Task: 0991510

TASK DATA FORM

Task Code: 0991512

Component: CHILLER WAT.COOL REC.20T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 11.3750 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	16.000000
2.RECURRING MAINTENANCE	1.000000
3.SEASONAL SHUTDOWN	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	17.500000	5.250000	22.750000
Material Cost \$	0.000000		0.000000
Equipment Hours			11.375000

Components In This Task: 0991510

TASK DATA FORM

Task Code: 0991513

Component: CHILLER WAT.COOL REC.20T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE CHILLER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 7.4750 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE CHILLER	23.000000

Material Resources

Description	Quantity	Unit Cost
CHILLER	1	9000.0000
		9000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	23.000000	6.900000	29.900000
Material Cost \$	9000.000000		9000.000000
Equipment Hours			7.475000

Components In This Task: 0991510

TASK DATA FORM

Task Code: 0991521

Component: CHILLER WAT.COOL REC.50T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR HERMETIC CHILLER
 Unit of Measure: COUNT
 Persons per Team: 3 Task Duration: 6.0233 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	COMPRESSOR	2	5150.0000
2.REMOVE/REPLACE COMPRESSOR (2)	11.600000	EVAP.TUBE	1	100.0000
3.REMOVE/REPL. EVAPORATOR TUBE	0.900000	COND.TUBE	2	100.0000
4.REMOVE/REPLACE CONDENSER TUBE	0.900000			10600.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	13.900000	4.170000	18.070000
Material Cost \$	10600.000000		10600.000000
Equipment Hours			6.023333

Components In This Task: 0991520

TASK DATA FORM

Task Code: 0991522

Component: CHILLER WAT.COOL REC.50T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 11.3750 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	16.000000			0.0000
2.RECURRING MAINTENANCE	1.000000			
3.SEASONAL SHUTDOWN	0.500000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	17.500000	5.250000	22.750000
Material Cost \$	0.000000		0.000000
Equipment Hours			11.375000

Components In This Task: 0991520

TASK DATA FORM

Task Code: 0991523

Component: CHILLER WAT.COOL REC.50T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE CHILLER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 12.0250 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE CHILLER	37.000000

Material Resources

Description	Quantity	Unit Cost
CHILLER	1	15000.0000
		15000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	37.000000	11.100000	48.100000
Material	Cost \$	15000.000000		15000.000000
Equipment	Hours			12.025000

Components In This Task: 0991520

TASK DATA FORM

Task Code: 0991531

Component: CHILLER WAT.COOL REC.100T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR HERMETIC CHILLER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 4.5175 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR CONTROLS	0.500000
2.REMOVE/REPLACE COMPRESSOR (2)	11.600000
3.REMOVE/REPL. EVAPORATOR TUBE	0.900000
4.REMOVE/REPLACE CONDENSER TUBE	0.900000

Material Resources

Description	Quantity	Unit Cost
COMPRESSOR	2	13600.0000
EVAP.TUBE	1	100.0000
COND.TUBE	1	100.0000
		27400.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	13.900000	4.170000	18.070000
Material	Cost \$	27400.000000		27400.000000
Equipment	Hours			4.517500

Components In This Task: 0991530

TASK DATA FORM

Task Code: 0991532

Component: CHILLER WAT.COOL REC.100T

System: COOLING GENERATION

Subsystem: EQUIPMENT

Task Description: PM PREVENTIVE MAINTENANCE

Unit of Measure: COUNT

Persons per Team: 2 Task Duration: 11.3750 hours

Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	16.000000
2.RECURRING MAINTENANCE	1.000000
3.SEASONAL SHUTDOWN	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	17.500000	5.250000	22.750000
Material Cost \$	0.000000		0.000000
Equipment Hours			11.375000

Components In This Task: 0991530

TASK DATA FORM

Task Code: 0991533

Component: CHILLER WAT.COOL REC.100T

System: COOLING GENERATION

Subsystem: EQUIPMENT

Task Description: REPLACE REPLACE CHILLER

Unit of Measure: COUNT

Persons per Team: 4 Task Duration: 18.5250 hours

Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE CHILLER	57.000000

Material Resources

Description	Quantity	Unit Cost
CHILLER	1	25500.0000
		25500.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	57.000000	17.100000	74.100000
Material Cost \$	25500.000000		25500.000000
Equipment Hours			18.525000

Components In This Task: 0991530

TASK DATA FORM

Task Code: 0991541

Component: CHILLER WAT. COOL REC. 10T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR HERMETIC CHILLER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 5.2650 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	COMPRESSOR	1	3000.0000
2.REMOVE/REPLACE COMPRESSOR	5.800000	EVAP. TUBE	1	100.0000
3.REM./REPLACE EVAPORATOR TUBE	0.900000	COND. TUBE	1	100.0000
4.REM./REPLACE CONDENSER TUBE	0.900000			3200.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	8.100000	2.430000	10.530000
Material Cost \$	3200.000000		3200.000000
Equipment Hours			5.265000

Components In This Task: 0991540

TASK DATA FORM

Task Code: 0991542

Component: CHILLER WAT. COOL REC. 10T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 10.0750 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	14.000000			0.0000
2.RECURRING MAINTENANCE	1.000000			
3.SEASONAL SHUTDOWN	0.500000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	15.500000	4.650000	20.150000
Material Cost \$	0.000000		0.000000
Equipment Hours			10.075000

Components In This Task: 0991540

TASK DATA FORM

Task Code: 0991543

Component: CHILLER WAT. COOL REC. 10T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE CHILLER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 5.2000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE CHILLER	16.000000	CHILLER	1	5000.0000
				5000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	16.000000	4.800000	20.800000
Material Cost \$	5000.000000		5000.000000
Equipment Hours			5.200000

Components In This Task: 0991540

TASK DATA FORM

Task Code: 0991551

Component: CHILLER WAT.COOL REC.200T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR HERMETIC CHILLER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 4.5175 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	COMPRESSOR	2	20700.0000
2.REMOVE/REPLACE COMPRESSOR (2)	11.600000	EVAP. TUBE	1	100.0000
3.REMOVE/REPL. EVAPORATOR TUBE	0.900000	COND. TUBE	1	100.0000
4.REMOVE/REPLACE CONDENSER TUBE	0.900000			41600.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	13.900000	4.170000	18.070000
Material Cost \$	41600.000000		41600.000000
Equipment Hours			4.517500

Components In This Task: 0991550

TASK DATA FORM

Task Code: 0991552

Component: CHILLER WAT.COOL REC.200T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 11.3750 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	16.000000
2.RECURRING MAINTENANCE	1.000000
3.SEASONAL SHUTDOWN	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	17.500000	5.250000	22.750000
Material Cost \$	0.000000		0.000000
Equipment Hours			11.375000

Components In This Task: 0991550

TASK DATA FORM

Task Code: 0991553

Component: CHILLER WAT.COOL REC.200T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE CHILLER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 18.5250 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE CHILLER	57.000000

Material Resources

Description	Quantity	Unit Cost
CHILLER	1	50000.0000
		50000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	57.000000	17.100000	74.100000
Material Cost \$	50000.000000		50000.000000
Equipment Hours			18.525000

Components In This Task: 0991550

TASK DATA FORM

Task Code: 0991611

Component: CHILL. HERMETIC CENT. 100T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR CHILLER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 8.3850 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR CONTROLS	0.500000
2.REMOVE/REPLACE COMPRESSOR	5.800000
3.REMOVE/REPLACE CONDENSER TUBE	0.900000
4.REMOVE/REPL.EVAPORATOR TUBE	0.900000
5.REMOVE/REPL. REFRIGERANT FILTER	0.400000
6.REMOVE/REPL. REFRIGERANT	4.400000

Material Resources

Description	Quantity	Unit Cost
COMPRESSOR	1	20700.0000
REFRIGERANT	100 LBS.	1.6700
COND.TUBE	1	100.0000
EVAP.TUBE	1	100.0000
		21067.0000

FREQUENCY OF OCCURRENCE

Zone	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	12.900000	3.870000	16.770000
Material Cost \$	21067.000000		21067.000000
Equipment Hours			8.385000

Components In This Task: 0991610

TASK DATA FORM

Task Code: 0991612

Component: CHILL. HERMETIC CENT. 100T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 16.5750 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	24.000000
2.RECURRING MAINTENANCE	1.000000
3.SEASONAL SHUTDOWN	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

FREQUENCY OF OCCURRENCE

Zone	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	25.500000	7.650000	33.150000
Material Cost \$	0.000000		0.000000
Equipment Hours			16.575000

Components In This Task: 0991610

TASK DATA FORM

Task Code: 0991613

Component: CHILL. HERMETIC CENT. 100T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE CHILLER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 15.6000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE CHILLER	48.000000	CHILLER	1	35650.0000
				35650.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	48.000000	14.400000	62.400000
Material Cost \$		35650.000000		35650.000000
Equipment	Hours			15.600000

Components In This Task: 0991610

TASK DATA FORM

Task Code: 0991621

Component: CHILL. HERMETIC CENT. 300T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR CHILLER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 8.1250 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	COMPRESSOR	3	20700.0000
2.REMOVE/REPLACE COMPRESSOR	5.800000	REFRIGERANT	300 LBS.	1.6700
3.REMOVE/REPLACE CONDENSER TUBE	0.900000	COND.TUBE	1	100.0000
4.REMOVE/REPLACE EVAPORATOR TUBE	0.900000	EVAP.TUBE	1	100.0000
5.REM./REPL. REFRIGERANT FILTER	0.400000			62801.0000
6.REM./REPL. REFRIGERANT	4.000000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	12.500000	3.750000	16.250000
Material Cost \$		62801.000000		62801.000000
Equipment	Hours			8.125000

Components In This Task: 0991610

TASK DATA FORM

Task Code: 0991622

Component: CHILL. HERMETIC CENT. 300T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 16.5750 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	24.000000
2.RECURRING MAINTENANCE	1.000000
3.SEASONAL SHUTDOWN	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	25.500000	7.650000	33.150000
Material Cost \$	0.000000		0.000000
Equipment Hours			16.575000

Components In This Task: 0991620

TASK DATA FORM

Task Code: 0991623

Component: CHILL. HERMETIC CENT. 300T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE CHILLER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 24.3750 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE CHILLER	75.000000

Material Resources

Description	Quantity	Unit Cost
CHILLER	1	58275.0000
		58275.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	75.000000	22.500000	97.500000
Material Cost \$	58275.000000		58275.000000
Equipment Hours			24.375000

Components In This Task: 0991620

TASK DATA FORM

Task Code: 0991631

Component: CHILL. HERMETIC CENT. 900T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR CHILLER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 8.3850 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1. REPAIR CONTROLS	0.500000
2. REMOVE/REPLACE COMPRESSOR	5.800000
3. REMOVE/REPLACE CONDENSER TUBE	0.900000
4. REMOVE/REPLACE EVAPORATOR TUBE	0.900000
5. REM./REPLACE REFRIGERANT FILTER	0.400000
6. REMOVE/REPLACE REFRIGERANT	4.400000

Material Resources

Description	Quantity	Unit Cost
COMPRESSOR	9	20700.0000
REFRIGERANT	900 LBS.	1.6700
COND. TUBE	1	100.0000
EVAP. TUBE	1	100.0000
		188003.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	12.900000	3.870000	16.770000
Material Cost \$	188003.000000		188003.000000
Equipment Hours			8.385000

Components In This Task: 0991630

TASK DATA FORM

Task Code: 0991632

Component: CHILL. HERMETIC CENT. 900T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 16.5750 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1. ANNUAL MAINTENANCE	24.000000
2. RECURRING MAINTENANCE	1.000000
3. SEASONAL SHUTDOWN	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	25.500000	7.650000	33.150000
Material Cost \$	0.000000		0.000000
Equipment Hours			16.575000

Components In This Task: 0991630

TASK DATA FORM

Task Code: 0991633

Component: CHILL. HERMETIC CENT. 900T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE CHILLER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 40.6250 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE CHILLER	125.000000	CHILLER	1	120000.0000
				120000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	125.000000	37.500000	162.500000
Material Cost \$	120000.000000		120000.000000
Equipment Hours			40.625000

Components In This Task: 0991630

TASK DATA FORM

Task Code: 0991711

Component: CHILL. OPEN CENT. 300T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR CHILLER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 14.1050 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	COMPRESSOR	3	20700.0000
2.REMOVE/REPLACE COMPRESSOR	5.800000	REFRIGERANT	300 LBS.	1.6700
3.REMOVE/REPLACE CONDENSER TUBE	0.900000	COND.TUBE	1	100.0000
4.REMOVE/REPLACE EVAPORATOR TUBE	0.900000	EVAP.TUBE	1	100.0000
5.REM./REPLACE REFRIGERANT FILTER	0.400000			62801.0000
6.REM./REPLACE REFRIGERANT	13.200000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	21.700000	6.510000	28.210000
Material Cost \$	62801.000000		62801.000000
Equipment Hours			14.105000

Components In This Task: 0991710

TASK DATA FORM

Task Code: 0991712

Component: CHILL. OPEN CENT. 300T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 43.2250 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	65.000000
2.RECURRING MAINTENANCE	1.000000
3.SEASONAL SHUTDOWN	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	66.500000	19.950000	86.450000
Material Cost \$	0.000000		0.000000
Equipment Hours			43.225000

Components In This Task: 0991710

TASK DATA FORM

Task Code: 0991713

Component: CHILL. OPEN CENT. 300T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE CHILLER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 24.3750 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE CHILLER	75.000000

Material Resources

Description	Quantity	Unit Cost
CHILLER	1	58275.0000
		58275.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	75.000000	22.500000	97.500000
Material Cost \$	58275.000000		58275.000000
Equipment Hours			24.375000

Components In This Task: 0991710

TASK DATA FORM

Task Code: 0991721Component: CHILL. OPEN CENT. 900TSystem: COOLING GENERATIONSubsystem: EQUIPMENTTask Description: M/R REPAIR CHILLERUnit of Measure: COUNTPersons per Team: 2 Task Duration: 8.3850 hoursTrade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR CONTROLS	0.500000
2.REMOVE/REPLACE COMPRESSOR	5.800000
3.REMOVE/REPLACE CONDENSER TUBE	0.900000
4.REMOVE/REPLACE EVAPORATOR TUBE	0.900000
5.REMOVE/REPL. REFRIGERANT FILTER	0.400000
6.REMOVE/REPL. REFRIGERANT	4.400000

Material Resources

Description	Quantity	Unit Cost
COMPRESSOR	9	20700.0000
REFRIGERANT	900 LBS.	1.6700
COND.TUBE	1	100.0000
EVAP.TUBE	1	100.0000
		188003.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	12.900000	3.870000	16.770000
Material Cost \$	188003.000000		188003.000000
Equipment Hours			8.385000

Components In This Task: 0991720

TASK DATA FORM

Task Code: 0991722Component: CHILL. OPEN CENT. 900TSystem: COOLING GENERATIONSubsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 2 Task Duration: 16.5750 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	24.000000
2.RECURRING MAINTENANCE	1.000000
3.SEASONAL SHUTDOWN	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.600	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	25.500000	7.650000	33.150000
Material Cost \$	0.000000		0.000000
Equipment Hours			16.575000

Components In This Task: 0991720

TASK DATA FORM

Task Code: 0991723

Component: CHILL. OPEN CENT. 900T System: COOLING GEN⁻RATION Subsystem: EQUIPMENT
 Task Description: REPLACE REFRIG. CHILLER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 40.6250 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE CHILLER	25.000000	CHILLER	1	120000.0000
				120000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	125.000000	37.500000	162.500000
Material Cost \$	120000.000000		120000.000000
Equipment Hours			40.625000

Components In This Task: 0991720

TASK DATA FORM

Task Code: 0991811

Component: CHILL.DBL.BNDL. HERM.100T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR CHILLER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 8.3850 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	COMPRESSOR	1	20700.0000
2.REMOVE/REPLACE COMPRESSOR	5.800000	REFRIGERANT	100 LBS.	1.6700
3.REMOVE/REPLACE CONDENSER TUBE	0.900000	OIL COOLER	1	250.0000
4.REMOVE/REPLACE EVAPORATOR TUBE	0.900000	COND.TUBE	1	100.0000
5.REM./REPLACE REFRIGERANT FILTER	0.400000	EVAP.TUBE	1	100.0000
6.REM./REPLACE REFRIGERANT	4.400000			21317.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	12.900000	3.870000	16.770000
Material Cost \$	21317.000000		21317.000000
Equipment Hours			8.385000

Components In This Task: 0991810

TASK DATA FORM

Task Code: 0991812

Component: CHILL.DBL.BNDL. HERM.100T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 19.1750 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	28.000000
2.RECURRING MAINTENANCE	1.000000
3.SEASONAL SHUTDOWN	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	29.500000	8.850000	38.350000
Material Cost \$	0.000000		0.000000
Equipment Hours			19.175000

Components In This Task: 0991810

TASK DATA FORM

Task Code: 0991813

Component: CHILL.DBL.BNDL. HERM.100T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE CHILLER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 17.2250 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE CHILLER	53.000000

Material Resources

Description	Quantity	Unit Cost
CHILLER	1	39000.0000
		39000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	53.000000	15.900000	68.900000
Material Cost \$	39000.000000		39000.000000
Equipment Hours			17.225000

Components In This Task: 0991810

TASK DATA FORM

Task Code: 0991821

Component: CHILL.DBL.BNDL. HERM.300T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: R/R REPAIR CHILLER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 16.7050 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	COMPRESSOR	3	29700.0000
2.REMOVE/REPLACE COMPRESSOR	5.800000	REFRIGERANT	300 LBS.	1.6700
3.REMOVE/REPLACE CONDENSER TUBE	0.900000	OIL COOLER	1	450.0000
4.REMOVE/REPLACE EVAPORATOR TUBE	0.900000	COND.TUBE	1	100.0000
5.REMOVE/REPL.REFRIGERANT FILTER	0.400000	EVAP.TUBE	1	100.0000
6.REMOVE/REPL. REFRIGERANT	13.200000			90251.0000
7.REMOVE/REPLACE OIL COOLER	4.000000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	25.700000	7.710000	33.410000
Material Cost \$	90251.000000		90251.000000
Equipment Hours			16.705000

Components In This Task: 0991810

TASK DATA FORM

Task Code: 0991822

Component: CHILL.DBL.BNDL. HERM.300T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 19.1750 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	28.000000			0.0000
2.RECURRING MAINTENANCE	1.000000			
3.SEASONAL SHUTDOWN	0.500000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	29.500000	8.850000	38.350000
Material Cost \$	0.000000		0.000000
Equipment Hours			19.175000

Components In This Task: 0991820

TASK DATA FORM

Task Code: 0991823

Component: CHILL.DBL.BNDL. HERM.300T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE CHILLER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 26.9750 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE CHILLER	83.000000	CHILLER	1	64000.0000
				64000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	83.000000	24.900000	107.900000
Material Cost \$	64000.000000		64000.000000
Equipment Hours			26.975000

Components In This Task: 0991820

TASK DATA FORM

Task Code: 0991831

Component: CHILL.DBL.BNDL. HERM.900T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR CHILLER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 32.8900 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	COMPRESSOR	9	20700.0000
2.REMOVE/REPLACE COMPRESSOR	5.800000	REFRIGERANT	900 LBS.	1.5700
3.REMOVE/REPLACE CONDENSED TUBE	0.000000	OIL COOLER	1	450.0000
4.REMOVE/REPLACE EVAPORATOR TUBE	0.900000	COND.TUBE	1	100.0000
5.REMOVE/REPL. REFRIGERANT FILTER	0.400000	EVAP.TUBE	1	100.0000
6.REMOVE/REPLACE REFRIGERANT	39.000000			188453.0000
7.REMOVE/REPLACE OIL COOLER	4.000000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	50.600000	15.180000	65.780000
Material Cost \$	188453.000000		188453.000000
Equipment Hours			32.890000

Components In This Task: 0991830

TASK DATA FORM

Task Code: 0991832

Component: CHILL.DBL.BNDL. HERM.900T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 19.1750 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources	
Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	28.000000
2.RECURRING MAINTENANCE	1.000000
3.SEASONAL SHUTDOWNS	0.500000

Material Resources		
Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	29.500000	8.850000	38.350000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			19.175000

Components In This Task: 0991830

TASK DATA FORM

Task Code: 0991833

Component: CHILL.DBL.BNDL. HERM.900T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE CHILLER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 44.5250 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources	
Subtask Description	Labor Hrs
1.REMOVE/REPLACE CHILLER	137.000000

Material Resources		
Description	Quantity	Unit Cost
CHILLER	1	132000.0000
		132000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	137.000000	41.100000	178.100000
Material	Cost \$	132000.000000		132000.000000
Equipment	Hours			44.525000

Components In This Task: 0991830

TASK DATA FORM

Task Code: 0991911

Component: CHILL. ONE STG. ABS. 100T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR CHILLER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 4,2900 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1. REPAIR CONTROLS	0.500000
2. REMOVE/REPL. CONCENTRATOR TUBE	0.900000
3. REMOVE/REPLACE CONDENSER TUBE	0.900000
4. REMOVE/REPLACE EVAPORATOR TUBE	0.900000
5. REMOVE/REPLACE ABSORBER TUBE	0.900000
6. REMOVE/REPLACE GANG PUMP	1.600000
7. REMOVE/REPLACE GANG PUMP MOTOR	0.900000

Material Resources

Description	Quantity	Unit Cost
GANG PUMP	1	4500.0000
MOTOR	1	2300.0000
CONC. TUBE	1	100.0000
COND. TUBE	1	100.0000
EVAP. TUBE	1	100.0000
ABS. TUBE	1	100.0000
		7200.0000

FREQUENCY OF OCCURRENCE

Zone	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	6.600000	1.980000	8.580000
Material	Cost \$	7200.000000		7200.000000
Equipment	Hours			4.290000

Components In This Task: 0991910

TASK DATA FORM

Task Code: 0991912

Component: CHILL. ONE STG. ABS. 100T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 56.8750 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1. ANNUAL MAINTENANCE	86.000000
2. RECURRING MAINTENANCE	1.000000
3. SEASONAL SHUTDOWN	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

FREQUENCY OF OCCURRENCE

Zone	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	87.500000	26.250000	113.750000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			56.875000

Components In This Task: 0991910

TASK DATA FORM

Task Code: 0991913

Component: CHILL. ONE STG. ABS. 100T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE CHILLER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 16.2500 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE CHILLER	50.000000	CHILLER	1	35000.0000
				35000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	50.000000	15.000000	65.000000
Material	Cost \$	35000.000000		35000.000000
Equipment	Hours			16.250000

Components In This task: 0991910

TASK DATA FORM

Task Code: 0991921

Component: CHILL. ONE STG. ABS. 300T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR CHILLER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 4.2900 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	GANG PUMP	1	4500.0000
2.REM./REPLACE CONCENTRATOR TUBE	0.900000	GNG.PUMP MTR	1	2300.0000
3.REMOVE/REPLACE CONDENSER TUBE	0.900000	CONC.TUBE	1	100.0000
4.REMOVE/REPLACE EVAPORATOR TUBE	0.900000	COND.TUBE	1	100.0000
5.REMOVE/REPLACE ABSORBER TUBE	0.900000	EVAP.TUBE	1	100.0000
6.REMOVE/REPLACE GANG PUMP	1.600000	ABS. TUBE	1	100.0000
7.REMOVE/REPLACE GANG PUMP MOTOR	0.900000			7200.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	6.800000	1.980000	8.580000
Material	Cost \$	7200.000000		7200.000000
Equipment	Hours			4.290000

Components In This Task: 0991920

TASK DATA FORM

Task Code: 0991922

Component: CHILL. ONE STG. ABS. 300T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 8.3850 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	11.400000
2.RECURRING MAINTENANCE	1.000000
3.SEASONAL SHUTDOWN	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	12.900000	3.870000	16.770000
Material Cost \$	0.000000		0.000000
Equipment Hours			8.385000

Components In This Task: 0991920

TASK DATA FORM

Task Code: 0991923

Component: CHILL. ONE STG. ABS. 300T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE CHILLER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 26.0000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE CHILLER	80.000000

Material Resources

Description	Quantity	Unit Cost
CHILLER	1	58000.0000
		58000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	80.000000	24.000000	104.000000
Material Cost \$	58000.000000		58000.000000
Equipment Hours			26.000000

Components In This Task: 0991920

TASK DATA FORM

Task Code: 0991931

Component: CHILL. ONE STG. ABS. 900T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR CHILLER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 4.2900 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	GANG PUMP	1	4500.0000
2.REM./REPLACE CONCENTRATOR TUBE	0.900000	GANG P.MOTOR	1	2300.0000
3.REMOVE/REPLACE CONDENSER TUBE	0.900000	CONC.TUBE	1	100.0000
4.REMOVE/REPLACE EVAPORATOR TUBE	0.900000	COND.TUBE	1	100.0000
5.REMOVE/REPLACE ABSORBER TUBE	0.900000	EVAP.TUBE	1	100.0000
6.REMOVE/REPLACE GANG PUMP	1.600000	ABS. TUBE	1	100.0000
7.REMOVE/REPLACE GANG PUMP MOTOR	0.900000			7200.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	6.600000	1.980000	8.580000
Material	Cost \$	7200.000000		7200.000000
Equipment	Hours			4.290000

Components In This Task: 0991930

TASK DATA FORM

Task Code: 0991932

Component: CHILL. ONE STG. ABS. 900T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 8.3850 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	11.400000			0.0000
2.RECURRING MAINTENANCE	1.000000			
3.SEASONAL SHUTDOWN	0.500000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	12.900000	3.870000	16.770000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			8.385000

Components In This Task: 0991930

TASK DATA FORM

Task Code: 0991933

Component: CHILL. ONE STG. ABS. 900T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE CHILLER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 41.9250 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE CHILLER	129.000000

Material Resources

Description	Quantity	Unit Cost
CHILLER	1	107000.0000
		107000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	129.000000	38.700000	167.700000
Material Cost \$	107000.000000		107000.000000
Equipment Hours			41.925000

Components In This Task: 0991930

TASK DATA FORM

Task Code: 0991A11

Component: CHILL. TWO STG. ABS. 300T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR CHILLER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 4.2900 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR CONTROLS	0.500000
2.REMOVE/REPL. CONCENTRATOR TUBE	0.900000
3.REMOVE/REPLACE CONDENSER TUBE	0.900000
4.REMOVE/REPLACE EVAPORATOR TUBE	0.900000
5.REMOVE/REPLACE ABSORBER TUBE	0.900000
6.REMOVE/REPLACE GANG PUMP	1.600000
7.REMOVE/REPLACE GANG PUMP MOTOR	0.900000

Material Resources

Description	Quantity	Unit Cost
GANG PUMP	1	4500.0000
GANG PUMP MT	1	2300.0000
CONC.TUBE	1	100.0000
COND.TUBE	1	100.0000
EVAP.TUBE	1	100.0000
ABS.TUBE	1	100.0000
		7200.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	6.600000	1.980000	8.580000
Material Cost \$	7200.000000		7200.000000
Equipment Hours			4.290000

Components In This Task: 0991910

TASK DATA FORM

Task Code: 0991A12

Component: CHILL. TWO STG. ABS. 300T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 8.3850 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	11.400000			0.0000
2.RECURRING MAINTENANCE	1.000000			
3.SEASONAL SHUTDOWNS	0.500000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	12.900000	3.870000	16.770000
Material Cost \$	0.000000		0.000000
Equipment Hours			8.385000

Components In This Task: 0991A10

TASK DATA FORM

Task Code: 0991A13

Component: CHILL. TWO STG. ABS. 300T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE CHILLER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 28.6000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE CHILLER	88.000000	CHILLER	1	64000.0000
				64000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	88.000000	26.400000	114.400000
Material Cost \$	64000.000000		64000.000000
Equipment Hours			28.600000

Components In This Task: 0991A10

TASK DATA FORM

Task Code: 0991A21

Component: CHILL. TWO STG. ABS. 900T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR CHILLER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 4.2900 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR CONTROLS	0.500000
2.REMOVE/REPL. CONCENTRATOR TUBE	0.900000
3.REMOVE/REPLACE CONDENSER TUBE	0.900000
4.REMOVE/REPLACE EVAPORATOR TUBE	0.900000
5.REMOVE/REPLACE ABSORBER TUBE	0.900000
6.REMOVE/REPLACE GANG PUMP TUBE	1.600000
7.REMOVE/REPLACE GANG PUMP MOTOR	0.900000

Material Resources

Description	Quantity	Unit Cost
GANG PUMP	1	4500.0000
GANG PUMP MT	1	2300.0000
CONC.TUBE	1	100.0000
COND.TUBE	1	100.0000
EVAP.TUBE	1	100.0000
ABS. TUBE	1	100.0000
		7200.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	6.600000	1.980000	8.580000
Material Cost \$	7200.000000		7200.000000
Equipment Hours			4.290000

Components In This Task: 0991A20

TASK DATA FORM

Task Code: 0991A22

Component: CHILL. TWO STG. ABS. 900T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 7.8000 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	11.400000
2.RECURRING MAINTENANCE	0.100000
3.SEASONAL SHUTDOWN	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	12.000000	3.600000	15.600000
Material Cost \$	0.000000		0.000000
Equipment Hours			7.800000

Components In This Task: 0991A20

TASK DATA FORM

Task Code: 0991A23

Component: CHILL. TWO STG. ABS. 900T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE CHILLER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 46.1500 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE CHILLER	142.000000	CHILLER	1	118700.0000
				118700.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	142.000000	42.600000	184.600000
Material Cost \$	118700.000000		118700.000000
Equipment Hours			46.150000

Components In This Task: 0991A20

TASK DATA FORM

Task Code: 0991B11

Component: AIR COOLED CONDENSER 5T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR CONDENSER
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 6.5000 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	FAN MOTOR	1	88.0000
2.REMOVE/REPLACE FAN BEARING	1.200000	OPERATOR	1	350.0000
3.REMOVE/REPLACE FAN MOTOR	1.800000			438.0000
4.REMOVE/REPLACE DAMPER	1.000000			
5.REMOVE/REPLACE DAMPER OPERATOR	0.500000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	5.000000	1.500000	6.500000
Material Cost \$	438.000000		438.000000
Equipment Hours			6.500000

Components In This Task: 0991B10

TASK DATA FORM

Task Code: 0991812

Component: AIR COOLED CONDENSER 5T

System: COOLING GENERATION

Subsystem: EQUIPMENT

Task Description: PM PREVENTIVE MAINTENANCE

Unit of Measure: COUNT

Persons per Team: 1

Task Duration: 2.3400 hours

Trade: REFRIG./AIR COND.

Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	0.900000
2.RECURRING MAINTENANCE	0.600000
3.SEASONAL SHUTDOWN	0.300000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.800000	0.540000	2.340000
Material Cost \$	0.000000		0.000000
Equipment Hours			2.340000

Components In This Task: 0991810

TASK DATA FORM

Task Code: 0991813

Component: AIR COOLED CONDENSER 5T

System: COOLING GENERATION

Subsystem: EQUIPMENT

Task Description: REPLACE REPLACE CONDENSER

Unit of Measure: COUNT

Persons per Team: 2

Task Duration: 4.5500 hours

Trade: REFRIG./AIR COND.

Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE CONDENSER	7.000000

Material Resources

Description	Quantity	Unit Cost
CONDENSER	1	775.0000
		775.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	7.000000	2.100000	9.100000
Material Cost \$	775.000000		775.000000
Equipment Hours			4.550000

Components In This Task: 0991810

TASK DATA FORM

Task Code: 0991821Component: AIR COOLED CONDENSER 20TSystem: COOLING GENERATIONSubsystem: EQUIPMENTTask Description: M/R REPAIR CONDENSERUnit of Measure: COUNTPersons per Team: 2 Task Duration: 3.2500 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1. REPAIR CONTROLS	0.500000
2. REMOVE/REPLACE FAN BEARING	1.200000
3. REMOVE/REPLACE FAN MOTOR	1.800000
4. REMOVE/REPLACE DAMPER	1.000000
5. REMOVE/REPLACE DAMPER OPERATOR	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN MOTOR	2	88.0000
OPERATOR	1	350.0000
		526.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	5.000000	1.500000	6.500000
Material Cost \$	526.000000		526.000000
Equipment Hours			3.250000

Components In This Task: 0991820

TASK DATA FORM

Task Code: 0991822Component: AIR COOLED CONDENSER 20TSystem: COOLING GENERATIONSubsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 2 Task Duration: 1.1700 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1. ANNUAL MAINTENANCE	0.900000
2. RECURRING MAINTENANCE	0.600000
3. SEASONAL SHUTDOWN	0.300000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.800000	0.540000	2.340000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.170000

Components In This Task: 0991820

TASK DATA FORM

Task Code: 0991823

Component: AIR COOLED CONDENSER 20T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE CONDENSER
 Unit of Measure: COUNT
 Persons per Team: 3 Task Duration: 6.9333 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE CONDENSER	16.000000	CONDENSER	1	2300.0000
				2300.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	16.000000	4.800000	20.800000
Material Cost \$	2300.000000		2300.000000
Equipment Hours			6.933333

Components In This Task: 0991820

TASK DATA FORM

Task Code: 0991831

Component: AIR COOLED CONDENSER 50T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR CONDENSER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 3.2500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	FAN MOTOR	3	88.0000
2.REMOVE/REPLACE FAN BEARING	1.200000	OPERATOR	1	350.0000
3.REMOVE/REPLACE FAN MOTOR	1.800000			614.0000
4.REMOVE/REPLACE DAMPER	1.000000			
5.REMOVE/REPLACE DAMPER OPERATOR	0.500000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.8000
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	5.000000	1.500000	6.500000
Material Cost \$	614.000000		614.000000
Equipment Hours			3.250000

Components In This Task: 0991830

TASK DATA FORM

Task Code: 0991832

Component: AIR COOLED CONDENSER 50T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.0800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	2.300000			0.0000
2.RECURRING MAINTENANCE	0.600000			
3.SEASONAL SHUTDOWN	0.300000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.200000	0.960000	4.160000
Material Cost \$	0.000000		0.000000
Equipment Hours			2.080000

Components In This Task: 0991830

TASK DATA FORM

Task Code: 0991833

Component: AIR COOLED CONDENSER 50T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE CONDENSER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 7.8000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE CONDENSER	24.000000	CONDENSER	1	4995.0000
				4995.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	24.000000	7.200000	31.200000
Material Cost \$	4995.000000		4995.000000
Equipment Hours			7.800000

Components In This Task: 0991830

TASK DATA FORM

Task Code: 0991841

Component: AIR COOLED CONDENSER 100T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR CONDENSER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 3.2500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR CONTROLS	0.500000
2.REMOVE/REPLACE FAN BEARING	1.200000
3.REMOVE/REPLACE FAN MOTOR	1.800000
4.REMOVE/REPLACE DAMPER	1.000000
5.REMOVE/REPLACE DAMPER OPERATOR	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN MOTOR	10	210.0000
OPERATOR	1	350.0000
		2450.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	5.000000	1.500000	6.500000
Material Cost \$	2450.000000		2450.000000
Equipment Hours			3.250000

Components In This Task: 0991840

TASK DATA FORM

Task Code: 0991842

Component: AIR COOLED CONDENSER 100T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.0800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	2.300000
2.RECURRING MAINTENANCE	0.600000
3.SEASONAL SHUTDOWN	0.300000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.200000	0.960000	4.160000
Material Cost \$	0.000000		0.000000
Equipment Hours			2.080000

Components In This Task: 0991840

TASK DATA FORM

Task Code: 0991B43

Component: AIR COOLED CONDENSER 100T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE CONDENSER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 11.7000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE CONDENSER	36.000000	CONDENSER	1	9980.0000
				9980.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	36.000000	10.800000	46.800000
Material Cost \$	9980.000000		9980.000000
Equipment Hours			11.700000

Components In This Task: 0991B40

TASK DATA FORM

Task Code: 0991C11

Component: COOLING TOWER 50T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR COOLING TOWER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.6000 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	FAN BEARING	1	25.0000
2.REMOVE/REPLACE FAN BEARING	1.200000	FAN MOTOR	1	1095.0000
3.REMOVE/REPLACE FAN MOTOR	1.800000	FLOAT VALVE	1	21.0000
4.REMOVE/REPLACE FLOAT VALVAE	0.500000			1141.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.000000	1.200000	5.200000
Material Cost \$	1141.000000		1141.000000
Equipment Hours			2.600000

Components In This Task: 0991C10

TASK DATA FORM

Task Code: 0991C12

Component: COOLING TOWER 50T

System: COOLING GENERATION

Subsystem: EQUIPMENT

Task Description: PM PREVENTIVE MAINTENANCE

Unit of Measure: COUNT

Persons per Team: 2 Task Duration: 2.2750 hours

Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	2.100000
2.RECURRING MAINTENANCE	0.700000
3.SEASONAL SHUTDOWNS	0.700000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.500000	1.050000	4.550000
Material Cost \$	0.000000		0.000000
Equipment Hours			2.275000

Components In This Task: 0991C10

TASK DATA FORM

Task Code: 0991C13

Component: COOLING TOWER 50T

System: COOLING GENERATION

Subsystem: EQUIPMENT

Task Description: REPLACE REPLACE COOLING TOWER

Unit of Measure: COUNT

Persons per Team: 4 Task Duration: 11.7000 hours

Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE COOLING TOWER	36.000000

Material Resources

Description	Quantity	Unit Cost
COOLING TOWER	1	4225.0000
		4225.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	36.000000	10.800000	46.800000
Material Cost \$	4225.000000		4225.000000
Equipment Hours			11.700000

Components In This Task: 0991C10

TASK DATA FORM

Task Code: 0991C21Component: COOLING TOWER 100TSystem: COOLING GENERATIONSubsystem: EQUIPMENTTask Description: M/R REPAIR COOLING TOWERUnit of Measure: COUNTPersons per Team: 2 Task Duration: 2.6000 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR CONTROLS	0.500000
2.REMOVE/REPLACE FAN BEARING	1.200000
3.REMOVE/REPLACE FAN MOTOR	1.800000
4.REMOVE/REPLACE FLOAT VALVE	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BEARING	1	25.0000
FAN MOTOR	1	1095.0000
FLOAT VALVE	1	21.0000
		1141.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.000000	1.200000	5.200000
Material Cost \$	1141.000000		1141.000000
Equipment Hours			2.600000

Components In This Task: 0991C20

TASK DATA FORM

Task Code: 0991C22Component: COOLING TOWER 100TSystem: COOLING GENERATIONSubsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 2 Task Duration: 7.0850 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	9.000000
2.RECURRING MAINTENANCE	0.700000
3.SEASONAL SHUTDOWN	1.200000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	10.900000	3.270000	14.170000
Material Cost \$	0.000000		0.000000
Equipment Hours			7.085000

Components In This Task: 0991C20

TASK DATA FORM

Task Code: 0991C23Component: COOLING TOWER 100TSystem: COOLING GENERATIONSubsystem: EQUIPMENTTask Description: REPLACE REPLACE COOLING TOWERUnit of Measure: COUNTPersons per Team: 4 Task Duration: 13.0000 hoursTrade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE COOLING TOWER	40.000000	COOLING TOWER	1	9500.0000
				9500.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	40.000000	12.000000	52.000000
Material	Cost \$	9500.000000		9500.000000
Equipment	Hours			13.000000

Components In This Task: 0991C20

TASK DATA FORM

Task Code: 0991C31Component: COOLING TOWER 300TSystem: COOLING GENERATIONSubsystem: EQUIPMENTTask Description: M/R REPAIR COOLING TOWERUnit of Measure: COUNTPersons per Team: 2 Task Duration: 2.6000 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	FAN BEARING	1	50.0000
2.REMOVE/REPLACE FAN BEARING	1.200000	FAN MOTOR	1	2300.0000
3.REMOVE/REPLACE FAN MOTOR	1.800000	FLOAT VALVE	1	21.0000
4.REMOVE/REPLACE FLOAT VALVE	0.500000			2371.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	4.000000	1.200000	5.200000
Material	Cost \$	2371.000000		2371.000000
Equipment	Hours			2.600000

Components In This Task: 0991C30

TASK DATA FORM

Task Code: 0991C32

Component: COOLING TOWER 300T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 8.2550 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	10.400000			0.0000
2.RECURRING MAINTENANCE	1.100000			
3.SEASONAL SHUTDOWN	1.200000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor hours	12.700000	3.810000	15.510000
Material Cost \$	0.000000		0.000000
Equipment Hours			8.255000

Components In This Task: 0991C30

TASK DATA FORM

Task Code: 0991C33

Component: COOLING TOWER 300T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE COOLING TOWER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 19.5000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE COOLING TOWER	60.000000	COOLING TOWER	1	15450.0000
				15450.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	60.000000	18.000000	78.000000
Material Cost \$	15450.000000		15450.000000
Equipment Hours			19.500000

Components In This Task: 0991C30

TASK DATA FORM

Task Code: 0991C41

Component: COOLING TOWER 900T

System: COOLING GENERATION

Subsystem: EQUIPMENT

Task Description: M/R REPAIR COOLING TOWER

Unit of Measure: COUNT

Persons per Team: 2

Task Duration: 2.6000 hours

Trade: REFRIG./AIR COND.

Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR CONTROLS	0.500000
2.REMOVE/REPLACE FAN BEARING	1.200000
3.REMOVE/REPLACE FAN MOTOR	1.800000
4.REMOVE/REPLACE FLOAT VALVE	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BEARING	1	50.0000
FAN MOTOR	1	2300.0000
FLOAT VALVE	1	21.0000
		2371.0000

Zone	FREQUENCY OF OCCURRENCE		Lo
	High	Average	
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.000000	1.200000	5.200000
Material Cost \$	2371.000000		2371.000000
Equipment Hours			2.600000

Components In This Task: 0991C40

TASK DATA FORM

Task Code: 0991C42

Component: COOLING TOWER 900T

System: COOLING GENERATION

Subsystem: EQUIPMENT

Task Description: PM PREVENTIVE MAINTENANCE

Unit of Measure: COUNT

Persons per Team: 2

Task Duration: 8.9700 hours

Trade: REFRIG./AIR COND.

Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	10.400000
2.RECURRING MAINTENANCE	2.200000
3.SEASONAL SHUTDOWN	1.200000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		Low
	High	Average	
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	13.800000	4.140000	17.940000
Material Cost \$	0.000000		0.000000
Equipment Hours			8.970000

Components In This Task: 0991C40

TASK DATA FORM

Task Code: 0991C43

Component: COOLING TOWER 900T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE COOLING TOWER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 32.1750 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE COOLING TOWER	99.000000	COOLING TOWER	1	40700.0000
				40700.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	99.000000	29.700000	128.700000
Material Cost \$	40700.000000		40700.000000
Equipment Hours			32.175000

Components In This Task: 0991C40

TASK DATA FORM

Task Code: 0991D11

Component: EVAPORATIVE CONDENSER 20T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR EVAPORATIVE CONDENSER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 5.9800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	FAN BEARING	1	13.5000
2.REMOVE/REPLACE FAN BEARING	1.200000	FAN MOTOR	1	120.0000
3.REMOVE/REPLACE FAN MOTOR	1.800000	PUMP	1	235.0000
4.REMOVE/REPLACE PUMP	0.300000	PUMP MOTOR	1	250.0000
5.REMOVE/REPLACE PUMP MOTOR	0.900000	NOZZLES	10	11.0000
6.REMOVE/REPLACE PUMP NOZZLES	4.000000	FLOAT VALVE	1	21.0000
7.REMOVE/REPLACE FLOAT VALVE	0.500000			749.5000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	9.200000	2.760000	11.960000
Material Cost \$	749.500000		749.500000
Equipment Hours			5.980000

Components In This Task: 0991D10

TASK DATA FORM

Task Code: 0991D12

Component: EVAPORATIVE CONDENSER 20T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PH PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 4.1600 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	4.900000
2.RECURRING MAINTENANCE	1.100000
3.SEASONAL SHUTDOWN	0.400000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	6.400000	1.920000	8.320000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			4.160000

Components In This Task: 0991D10

TASK DATA FORM

Task Code: 0991D13

Component: EVAPORATIVE CONDENSER 20T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE EVAPORATIVE CONDENSER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 9.1000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE CONDENSER	28.000000

Material Resources

Description	Quantity	Unit Cost
CONDENSER	1	3480.0000
		3480.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	28.000000	8.400000	36.400000
Material	Cost \$	3480.000000		3480.000000
Equipment	Hours			9.100000

Components In This Task: 0991D10

TASK DATA FORM

Task Code: 0991021

Component: EVAPORATIVE CONDENSER 100T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR EVAPORATIVE CONDENSER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 5.9800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	FAN BEARING	1	13.7500
2.REMOVE/REPLACE FAN BEARING	1.200000	FAN MOTOR	1	150.0000
3.REMOVE/REPLACE FAN MOTOR	1.800000	PUMP	1	355.0000
4.REMOVE/REPLACE PUMP	0.300000	PUMP MOTOR	1	564.0000
5.REMOVE/REPLACE PUMP MOTOR	0.900000	NOZZLES	10	11.0000
6.REMOVE/REPLACE NOZZLES	4.000000	FLOAT	1	21.0000
7.REMOVE/REPLACE FLOAT VALVE	0.500000			1213.7500

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	9.200000	2.760000	11.960000
Material Cost \$	1213.750000		1213.750000
Equipment Hours			5.980000

Components In This Task: 0991020

TASK DATA FORM

Task Code: 0991022

Component: EVAPORATIVE CONDENSER 100T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 6.8250 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	9.000000			0.0000
2.RECURRING MAINTENANCE	1.100000			
3.SEASONAL SHUTDOWN	0.400000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	10.500000	3.150000	13.650000
Material Cost \$	0.000000		0.000000
Equipment Hours			6.825000

Components In This Task: 0991020

TASK DATA FORM

Task Code: 0991023

Component: EVAPORATIVE CONDENSER 100T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE EVAPORATIVE CONDENSER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 25.0250 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE CONDENSER	77.000000	CONDENSER	1	9470.0000
				9470.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.800
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	77.000000	23.100000	100.100000
Material Cost \$	9470.000000		9470.000000
Equipment Hours			25.025000

Components In This Task: 0991020

TASK DATA FORM

Task Code: 0991031

Component: EVAPORATIVE CONDENSER 300T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR EVAPORATIVE CONDENSER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 5.9800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.500000	FAN BEARING	1	13.7500
2.REMOVE/REPLACE FAN BEARING	1.200000	FAN MOTOR	1	150.0000
3.REMOVE/REPLACE FAN MOTOR	1.800000	PUMP	1	750.0000
4.REMOVE/REPLACE PUMP	0.300000	PUMP MOTOR	1	1095.0000
5.REMOVE/REPLACE PUMP MOTOR	0.900000	NOZZLES	10	11.0000
6.REMOVE/REPLACE NOZZLES	4.000000	FLOAT VALVE	1	21.0000
7.REMOVE/REPLACE FLOAT VALVE	0.500000			2139.7500

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	9.200000	2.760000	11.960000
Material Cost \$	2139.750000		2139.750000
Equipment Hours			5.980000

Components In This Task: 0991030

TASK DATA FORM

Task Code: 0991032

Component: EVAPORATIVE CONDENSER 300T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 1.5600 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	0.900000			0.0000
2.RECURRING MAINTENANCE	1.100000			
3.SEASONAL SHUTDOWN	0.400000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.400000	0.720000	3.120000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.560000

Components In This Task: 0991030

TASK DATA FORM

Task Code: 0991033

Component: EVAPORATIVE CONDENSER 300T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE EVAPORATIVE CONDENSER
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 45.5000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE CONDENSER	140.000000	CONDENSER	1	30000.0000
				30000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	140.000000	42.000000	182.000000
Material Cost \$	30000.000000		30000.000000
Equipment Hours			45.500000

Components In This Task: 0991030

TASK DATA FORM

Task Code: 0991E01

Component: EXPANSION TANK System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REFILL EXPANSION TANK
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.0390 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1. REFILL AIR CHAMBER	0.030000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	7.540	18.850	37.700
2	3.240	8.100	16.200
3	2.400	6.000	12.000
4	2.220	5.550	11.100
5	1.880	4.700	9.400
6	2.000	5.000	10.000
7	1.540	3.850	7.700
8	1.540	3.850	7.700
9	1.360	3.400	6.800
10	1.200	3.000	6.000
11	1.200	3.000	6.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.030000	0.009000	0.039000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.039000

Components In This Task: 0991E00

TASK DATA FORM

Task Code: 0991E02

Component: EXPANSION TANK System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE EXPANSION TANK
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 1.7355 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1. REMOVE/INSTALL EXPANSION TANK	2.670000

Material Resources

Description	Quantity	Unit Cost
TANK	1	128.0000
		128.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	75.400	188.500	263.900
2	32.400	81.000	113.400
3	24.000	60.000	84.000
4	22.200	55.500	77.700
5	18.800	47.000	65.800
6	20.000	50.000	70.000
7	15.400	38.500	53.900
8	15.400	38.500	53.900
9	13.600	34.000	47.600
10	12.000	30.000	42.000
11	12.000	30.000	42.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.670000	0.601000	3.271000
Material Cost \$	128.000000		128.000000
Equipment Hours			1.735500

Components In This Task: 0991E00

TASK DATA FORM

Task Code: 0991F11

Component: REFRIG. FAN COIL 1T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR FAN COIL UNIT
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.5600 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE FAN MOTOR	1.200000

Material Resources

Description	Quantity	Unit Cost
MOTOR	1	50.0000
		50.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	50.000000		50.000000
Equipment Hours			1.560000

Components In This Task: 0991F10

TASK DATA FORM

Task Code: 0991F12

Component: REFRIG. FAN COIL 1T System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.CLEAN COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.650000

Components In This Task: 0991F10

TASK DATA FORM

Task Code: 0991F13Component: REFRIG. FAN COIL 1TSystem: COOLING GENERATIONSubsystem: EQUIPMENTTask Description: REPLACE REPLKACE FAN COIL UNITUnit of Measure: COUNTPersons per Team: 2 Task Duration: 1.3000 hoursTrade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN COIL UNIT	2.000000

Material Resources

Description	Quantity	Unit Cost
F. COIL UNIT	1	807.0000
		807.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.000000	0.600000	2.600000
Material Cost \$	807.000000		807.000000
Equipment Hours			1.300000

Components In This Task: 0991F10

TASK DATA FORM

Task Code: 0991F21Component: REFRIG. FAN COIL 3TSystem: COOLING GENERATIONSubsystem: EQUIPMENTTask Description: M/R REPAIR FAN COIL UNITUnit of Measure: COUNTPersons per Team: 1 Task Duration: 1.5600 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN MOTOR	1.200000

Material Resources

Description	Quantity	Unit Cost
MOTOR	1	88.0000
		88.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	88.000000		88.000000
Equipment Hours			1.560000

Components In This Task: 0991F20

TASK DATA FORM

Task Code: 0991F22Component: REFRIG. FAN COIL 3TSystem: COOLING GENERATIONSubsystem: EQUIPMENTTask Description: PMPREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 1Task Duration: 0.6500 hoursTrade: REFRIG./AIR COND.Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.CLEAN COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.500000	0.150000	0.650000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			0.650000

Components In This Task: 0991F20

TASK DATA FORM

Task Code: 0991F23Component: REFRIG. FAN COIL 3TSystem: COOLING GENERATIONSubsystem: EQUIPMENTTask Description: REPLACEREPLACE FAN COIL UNITUnit of Measure: COUNTPersons per Team: 2Task Duration: 1.4300 hoursTrade: REFRIG./AIR COND.Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN COIL UNIT	2.200000

Material Resources

Description	Quantity	Unit Cost
F. COIL UNIT	1	992.0000
		992.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	2.200000	0.680000	2.880000
Material	Cost \$	992.000000		992.000000
Equipment	Hours			1.430000

Components In This Task: 0991F20

TASK DATA FORM

Task Code: 0991F31Component: REFRIG. FAN COIL 5TSystem: COOLING GENERATIONSubsystem: EQUIPMENTTask Description: M/R REPAIR FAN COIL UNITUnit of Measure: COUNTPersons per Team: 1 Task Duration: 1.5600 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE MOTOR	1.200000

Material Resources

Description	Quantity	Unit Cost
MOTOR	1	185.0000
		185.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	185.000000		185.000000
Equipment Hours			1.560000

Components In This Task: 0991F30

TASK DATA FORM

Task Code: 0991F32Component: REFRIG. FAN COIL 5TSystem: COOLING GENERATIONSubsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 1 Task Duration: 0.6500 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.CLEAN COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.650000

Components In This Task: 0991F30

TASK DATA FORM

Task Code: 0991F33

Component: REFRIG. FAN COIL ST System: COOLING GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE FAN UNIT
 Unit of Measure: COOL
 Persons per Team: 2 Task Duration: 1.6250 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE FAN COIL UNIT	2.500000

Material Resources

Description	Quantity	Unit Cost
F. COIL UNIT	1	1170.0000
		1170.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.500000	0.750000	3.250000
Material Cost \$	1170.000000		1170.000000
Equipment Hours			1.625000

Components In This Task: 0991F30

TASK DATA FORM

Task Code: 0994111

Component: PIPE/FITTINGS ST.& C.I. System: COOLING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: M/R REPAIR CHILLED WATER PIPE
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 1 Task Duration: 0.3250 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.DISCONNECT FLANGE JOINT	0.084000
2.REMOVE FLANGE GASKET	0.013000
3.MAKE NEW GASKET	0.035000
4.INSTALL NEW GASKET	0.013000
5.CONNECT FLANGE JOINTS	0.072000
6.CLEAN FLANGE FACES	0.033000

Material Resources

Description	Quantity	Unit Cost
GASKET	1	0.1600
		0.1600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	37.700	56.550
2	8.100	16.200	24.300
3	6.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.250000	0.075000	0.325000
Material Cost \$	0.160000		0.160000
Equipment Hours			0.325000

Components In This Task: 0994110

TASK DATA FORM

Task Code: 0994112

Component: PIPE/FITTINGS ST.& C.I. System: COOLING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: REPLACE REPLACE CHILLED WATER PIPE, 12" SECTION
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 2 Task Duration: 5.3723 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.CHECK BREAK OR LEAK	0.012000
2.CUT WATER VALVE ON AND OFF	0.008000
3.REMOVE FIRST BROKEN SECTION	1.401000
4.REMOVE ADDITIONAL SECTIONS	0.605000
5.MATERIAL HANDLING	0.207000
6.CLEAN JOINTS	0.033000
7.INSTALL SECTION OF PIPE	1.579000
8.INSTALL LAST SECTION	4.413000
9.CHECK FOR LEAKS ADDITIONAL SECT	0.007000

Material Resources

Description	Quantity	Unit Cost
PIPE	12 FT	3.2500
		39.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	75.400	113.100	188.500
2	32.400	48.600	81.000
3	24.000	36.000	60.000
4	22.200	33.300	55.500
5	18.800	28.200	47.000
6	20.000	30.000	50.000
7	15.400	23.100	38.500
8	15.400	23.100	38.500
9	13.600	20.400	34.000
10	12.000	18.000	30.000
11	12.000	18.000	30.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	8.265000	2.479500	10.744500
Material Cost \$	39.000000		39.000000
Equipment Hours			5.372250

Components In This Task: 0994110

TASK DATA FORM

Task Code: 0994121

Component: PIPE/FITTINGS, COPPER System: COOLING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: M/R REPAIR SOLDER JOINT
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 1 Task Duration: 0.1846 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.MEASURE CUT AND REAM BOTH ENDS	0.041000
2.SOLDER FITTINGS	0.101000

Material Resources

Description	Quantity	Unit Cost
SOLDER	.5 OZ	0.1600
		0.0800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	37.700	56.550
2	8.100	16.200	24.300
3	6.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.142000	0.042600	0.184600
Material Cost \$	0.080000		0.080000
Equipment Hours			0.184600

Components In This Task: 0994120

TASK DATA FORM

Task Code: 0994122

Component: PIPE/FITTINGS, COPPER System: COOLING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: REPLACE REPLACE CHILLED WATER PIPE, 12' SECTION
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 2 Task Duration: 2.7755 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE 12' SECTION, INSTALL NEW	4.270000	PIPE	12 FT	4.0100
				48.1200

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	75.400	188.500
2	16.200	32.400	81.000
3	12.000	24.000	60.000
4	11.100	22.200	55.500
5	9.400	18.800	47.000
6	10.000	20.000	50.000
7	7.700	15.400	38.500
8	7.700	15.400	38.500
9	6.800	13.600	34.000
10	6.000	12.000	30.000
11	6.000	12.000	30.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.270000	1.281000	5.551000
Material Cost \$	48.120000		48.120000
Equipment Hours			2.775500

Components In This Task: 0994120

TASK DATA FORM

Task Code: 0994131

Component: PIPE AND FITTINGS, PVC System: COOLING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: M/R UNCLOG FLOOR DRAIN
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 1 Task Duration: 5.2000 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.UNCLOG PLUGGED FLOOR DRAIN	4.000000	SOLVENT	100 OZ.	0.2400
				24.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	13.200	17.600	22.000
2	12.600	16.800	21.000
3	13.350	17.800	22.250
4	14.250	19.000	23.750
5	14.550	19.400	24.250
6	15.000	20.000	25.000
7	16.350	21.800	27.250
8	16.950	22.600	28.250
9	18.000	24.000	30.000
10	19.200	25.600	32.000
11	26.250	35.000	43.750

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.000000	1.200000	5.200000
Material Cost \$	24.000000		24.000000
Equipment Hours			5.200000

Components In This Task: 0994130

TASK DATA FORM

Task Code: 0994132

Component: PIPE AND FITTINGS, PVC System: COOLING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: M/R UNCLOG MAIN DRAIN
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 1 Task Duration: 0.8190 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.UNCLOG MAIN DRAIN USING AUGER	0.630000

Material Resources

Description	Quantity	Unit Cost
AUGER KIT	1	3.8400
		3.8400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	6.600	8.800	11.000
2	6.300	8.400	10.500
3	6.675	8.900	11.125
4	7.125	9.500	11.875
5	7.275	9.700	12.125
6	7.500	10.000	12.500
7	8.175	10.900	13.625
8	8.475	11.300	14.125
9	9.000	12.000	15.000
10	9.600	12.800	16.000
11	13.125	17.500	21.875

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.630000	0.189000	0.819000
Material Cost \$	3.840000		3.840000
Equipment Hours			0.819000

Components In This Task: 0994130

TASK DATA FORM

Task Code: 0994133

Component: PIPE AND FITTINGS, PVC System: COOLING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: REPLACE REPLACE PIPE AND FITTINGS
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 2 Task Duration: 120.9000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE OLD PIPE, INSTALL NEW	186.000000

Material Resources

Description	Quantity	Unit Cost
PIPE	1000 FT.	7.8500
		7850.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	13.200	22.000	44.000
2	12.600	21.000	42.000
3	13.350	22.250	44.500
4	14.250	23.750	47.500
5	14.550	24.250	48.500
6	15.000	25.000	50.000
7	16.350	27.250	54.500
8	16.950	28.250	56.500
9	18.000	30.000	60.000
10	19.200	32.000	64.000
11	26.250	43.750	87.500

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	186.000000	55.800000	241.800000
Material Cost \$	7850.000000		7850.000000
Equipment Hours			120.900000

Components In This Task: 0994130

TASK DATA FORM

Task Code: 0994211

Component: GATE VALVE, 3/8" - 1 1/2" System: COOLING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: M/R REPACK GATE VALVE GLAND
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.3536 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.TURN VALVE OFF AND ON	0.017000
2.REMOVE PACKING NUT	0.011000
3.REMOVE HANDWHEEL SCREW	0.009000
4.REMOVE HANDWHEEL	0.013000
5.REMOVE PACKING GLAND	0.023000
6.MEASURE AND CUT NEW PACKING	0.025000
7.REMOVE OLD PACKING	0.051000
8.INSTALL NEW PACKING	0.025000
9.INSTALL PACKING GLAND	0.013000
10.INSTALL HANDWHEEL	0.013000
11.INSTALL HANDWHEEL SCREW	0.009000
12.INSTALL PACKING NUT	0.011000
13.TEST ACTION OF VALVE	0.017000
14.MATERIAL HANDLING	0.035000

Material Resources

Description	Quantity	Unit Cost
PACKING	2 02	0.2100
		0.4200

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	37.700	56.550
2	8.100	16.200	24.300
3	6.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.272000	0.081600	0.353600
Material Cost \$	0.420000		0.420000
Equipment Hours			0.353600

Components In This Task: 0994210

TASK DATA FORM

Task Code: 0994212

Component: GATE VALVE, 3/8" - 1 1/2" System: COOLING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: REPLACE REPLACE GATE VALVE, PARTIAL
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6890 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE OLD, INSTALL NEW	0.530000

Material Resources

Description	Quantity	Unit Cost
VALVE	1	16.9000
		16.9000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	75.400	113.100
2	16.200	32.400	48.600
3	12.000	24.000	36.000
4	11.100	22.200	33.300
5	9.400	18.800	28.200
6	10.000	20.000	30.000
7	7.700	15.400	23.100
8	7.700	15.400	23.100
9	6.800	13.600	20.400
10	6.000	12.000	18.000
11	6.000	12.000	18.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.530000	0.159000	0.689000
Material Cost \$	16.900000		16.900000
Equipment Hours			0.689000

Components In This Task: 0994210

TASK DATA FORM

Task Code: 0994221

Component: GATE VALVE, 2"-3" System: COOLING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: M/R REPACK GATE VALVE GLAND
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.3549 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.TURN VALVE OFF AND ON	0.017000
2.REMOVE PACKING NUT	0.011000
3.REMOVE HANDWHEEL SCREW	0.009000
4.REMOVE HANDWHEEL	0.013000
5.REMOVE PACKING GLAND	0.023000
6.MEASURE AND CUT NEW PACKING	0.026000
7.REMOVE OLD PACKING	0.051000
8.INSTALL NEW PACKING	0.025000
9.INSTALL PACKING GLAND	0.013000
10.INSTALL HANDWHEEL	0.013000
11.INSTALL HANDWHEEL SCREW	0.009000
12.INSTALL PACKING NUT	0.011000
13.TEST ACTION OF VALVE	0.017000
14.MATERIAL HANDLING	0.035000

Material Resources

Description	Quantity	Unit Cost
PACKING	4 OZ	0.2100
		0.8400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	37.700	56.550
2	8.100	16.200	24.300
3	6.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.273000	0.081900	0.354900
Material Cost \$	0.840000		0.840000
Equipment Hours			0.354900

Components In This Task: 0994220

TASK DATA FORM

Task Code: 0994222

Component: GATE VALVE, 2"-3" System: COOLING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: REPLACE REPLACE GATE VALVE, PARTIAL
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.5720 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE VALVE PARTS	0.440000

Material Resources

Description	Quantity	Unit Cost
VALVE	1	88.7300
		88.7300

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	75.400	113.100
2	16.200	32.400	48.600
3	12.000	24.000	36.000
4	11.100	22.200	33.300
5	9.400	18.800	28.200
6	10.000	20.000	30.000
7	7.700	15.400	23.100
8	7.700	15.400	23.100
9	6.800	13.600	20.400
10	6.000	12.000	18.000
11	6.000	12.000	18.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.440000	0.132000	0.572000
Material Cost \$	88.730000		88.730000
Equipment Hours			0.572000

Components In This Task: 0994220

TASK DATA FORM

Task Code: 0994281

Component: DRAIN VALVE System: COOLING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: M/R REPACK DRAIN VALVE GLAND
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.3549 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.TURN VALVE OFF AND ON	0.017000
2.REMOVE PACKING UNIT	0.011000
3.REMOVE HANDWHEEL SCREW	0.009000
4.REMOVE HANDWHEEL	0.013000
5.REMOVE PACKING GLAND	0.023000
6.MEASURE AND CUT NEW PACKING	0.026000
7.REMOVE OLD PACKING	0.051000
8.INSTALL NEW PACKING	0.025000
9.INSTALL PACKING GLAND	0.013000
10.INSTALL HANDWHEEL	0.013000
11.INSTALL HANDWHEEL SCREW	0.009000
12.INSTALL PACKING NUT	0.011000
13.TEST ACTION OF VALVE	0.017000
14.MATERIAL HANDLING	0.035000

Material Resources

Description	Quantity	Unit Cost
PACKING	1.5 OZ	0.2100
		0.3150

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	7.540	11.310	18.850
2	3.240	4.860	8.100
3	2.400	3.600	6.000
4	2.220	3.330	5.550
5	1.880	2.820	4.700
6	2.000	3.000	5.000
7	1.540	2.310	3.850
8	1.540	2.310	3.850
9	1.360	2.040	3.400
10	1.200	1.800	3.000
11	1.200	1.800	3.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.273000	0.081900	0.354900
Material Cost \$	0.315000		0.315000
Equipment Hours			0.354900

Components In This Task: 0994280

TASK DATA FORM

Task Code: 0994282

Component: DRAIN VALVE System: COOLING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: M/R REPLACE VALVE STEM ASSEMBLY
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.0559 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.TURN VALVES OFF AND ON	0.017000
2.UNSCREW BONNET RING	0.011000
3.REMOVE AND INSTALL ASSEMBLY	0.004000
4.INSTALL BONNET RING	0.011000

Material Resources

Description	Quantity	Unit Cost
STEM ASSY.	1	5.5000
		5.5000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	30.160	37.700
2	8.100	12.960	16.200
3	6.000	9.600	12.000
4	5.550	8.880	11.100
5	4.700	7.520	9.400
6	5.000	8.000	10.000
7	3.850	6.160	7.700
8	3.850	6.160	7.700
9	3.400	5.440	6.800
10	3.000	4.800	6.000
11	3.000	4.800	6.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.043000	0.012900	0.055900
Material Cost \$	5.500000		5.500000
Equipment Hours			0.055900

Components In This Task: 0994280

TASK DATA FORM

Task Code: 0994283

Component: DRAIN VALVE System: COOLING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: REPLACE REPLACE VALVE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6890 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE OLD VALVE, INSTALL NEW	0.530000

Material Resources

Description	Quantity	Unit Cost
VALVE	1	16.9000
		16.9000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	56.550	75.400	94.250
2	24.300	32.400	40.500
3	18.000	24.000	30.000
4	16.650	22.200	27.750
5	14.100	18.800	23.500
6	15.000	20.000	25.000
7	11.550	15.400	19.250
8	11.550	15.400	19.250
9	10.200	13.600	17.000
10	9.000	12.000	15.000
11	9.000	12.000	15.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.530000	0.159000	0.689000
Material Cost \$	16.900000		16.900000
Equipment Hours			0.689000

Components In This Task: 0994280

TASK DATA FORM

Task Code: 0994341

Component: PIPE INSULATION System: COOLING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: M/R REPAIR BROKEN PIPE INSULATION
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 1 Task Duration: 0.3380 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE INSULATION	0.098000
2.MATERIAL HANDLING	0.012000
3.INSTALL INSULATION	0.138000
4.MATERIAL HANDLING	0.012000

Material Resources

Description	Quantity	Unit Cost
TAPE	4 FT	0.0400
INSULATION	2 FT	0.8500
		1.8600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	11.310	18.850	37.700
2	4.860	8.100	16.200
3	3.600	6.000	12.000
4	3.330	5.550	11.100
5	2.820	4.700	9.400
6	3.000	5.000	10.000
7	2.310	3.850	7.700
8	2.310	3.850	7.700
9	2.040	3.400	6.800
10	1.800	3.000	6.000
11	1.800	3.000	6.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.260000	0.078000	0.338000
Material Cost \$	1.860000		1.860000
Equipment Hours			0.338000

Components In This Task: 0994340

TASK DATA FORM

Task Code: 0994342

Component: PIPE INSULATION System: COOLING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: REPLACE REPLACE PIPE INSULATION
 Unit of Measure: 1000 LINEAR FEET
 Persons per Team: 1 Task Duration: 91.0000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/INSTALL INSULATION	70.000000	INSULATION	1000 FT	0.8500 850.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	113.100	188.500
2	16.200	48.600	81.000
3	12.000	36.000	60.000
4	11.100	33.300	55.500
5	9.400	28.200	47.000
6	10.000	30.000	50.000
7	7.700	23.100	38.500
8	7.700	23.100	38.500
9	6.800	20.400	34.000
10	6.000	18.000	30.000
11	6.000	18.000	30.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	70.000000	21.000000	91.000000
Material Cost \$	850.000000		850.000000
Equipment Hours			91.000000

Components In This Task: 0994340

TASK DATA FORM

Task Code: 0994411

Component: CIRCULATOR PUMP, < 1 HP System: COOLING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: M/R REPAIR CIRCULATOR PUMP, 1/12 - 1/2 HP
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.5863 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.LOOSEN COUPLING FROM PUMP SHAFT	0.009000	SEAL	2	0.7000 1.4000
2.REMOVE 4 STUD BOLTS IN MOTOR	0.035000			
3.REMOVE MOTOR	0.052000			
4.REMOVE IMPELLAR NUT FROM SHAFT	0.033000			
5.REMOVE SEAL ASSEMBLY	0.019000			
6.INSPECT BEARING BRACKETS FACE	0.005000			
7.CLEAN BEARING	0.016000			
8.INSPECT SHAFT	0.005000			
9.CLEAN SHAFT	0.017000			
10.INSTALL NEW SEAL AND RUBBER	0.013000			
11.INSTALL SEAL SPRING AND WASHERS	0.006000			
12.INSTALL IMPELLAR NUT ON SHAFT	0.031000			
13.CLEAN PUMP BODY GASKET AREA	0.037000			
14.INSTALL NEW GASKET (READY MADE)	0.000000			
15.INSTALL IMPELLAR	0.009000			
16.INSTALL 4 STUD BOLTS	0.035000			
17.ASSEMBLE MOTOR TO BEARING	0.024000			
18.INSTALL 4 STUD BOLTS	0.027000			
19.TIGHTEN COUPLING	0.009000			
20.FINAL TIGHTENING OF BOLTS	0.027000			
21.TEST RUN	0.042000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	7.540	18.850	37.700
2	3.240	8.100	16.200
3	2.400	6.000	12.000
4	2.220	5.550	11.100
5	1.880	4.700	9.400
6	2.000	5.000	10.000
7	1.540	3.850	7.700
8	1.540	3.850	7.700
9	1.360	3.400	6.800
10	1.200	3.000	6.000
11	1.200	3.000	6.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.451000	0.135300	0.586300
Material Cost \$	1.400000		1.400000
Equipment Hours			0.586300

Components In This Task: 0994410

TASK DATA FORM

Task Code: 0994412

Component: CIRCULATOR PUMP, < 1 HP System: COOLING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: PH PREVENTIVE MAINTENANCE ON CIRCULATOR PUMP
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.1092 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.CHECK FOR LEAKS	0.008000
2.CHECK PUMP OPERATION	0.009000
3.LUBRICATE PUMP AND MOTOR	0.036000
4.CHECK SUCTION OR DISCHARGE PRES	0.003000
5.CHECK PACKING GLANDS,TIGHTEN	0.011000
6.FILL OUT INSPECTION REPORT	0.017000

Material Resources

Description	Quantity	Unit Cost
LUBRICATE	2 OZ	0.1300
		0.2600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.084000	0.025200	0.109200
Material Cost \$	0.260000		0.260000
Equipment Hours			0.109200

Components In This Task: 0994410

TASK DATA FORM

Task Code: 0994413

Component: CIRCULATOR PUMP, < 1 HP System: COOLING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: REPLACE REPLACE CIRCULATION PUMP
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 4.1990 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE PUMP/MOTOR, INSTALL NEW	3.230000

Material Resources

Description	Quantity	Unit Cost
PUMP	1	350.0000
		350.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	56.550	75.400
2	16.200	24.300	32.400
3	12.000	18.000	24.000
4	11.100	16.650	22.200
5	9.400	14.100	18.800
6	10.000	15.000	20.000
7	7.700	11.550	15.400
8	7.700	11.550	15.400
9	6.800	10.200	13.600
10	6.000	9.000	12.000
11	6.000	9.000	12.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.230000	0.969000	4.199000
Material Cost \$	350.000000		350.000000
Equipment Hours			4.199000

Components In This Task: 0994410

TASK DATA FORM

Task Code: 0994421

Component: 5 TON CHILLER ACH RECIP System: COOLING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: M/R REPAIR CIRCULATION PUMP
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6032 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1. LOOSEN COUPLING FROM PUMP SHAFT	0.009000	SEAL	2	16.4100
2. REMOVE 4 STUD BOLTS IN MOTOR	0.035000			32.8200
3. REMOVE MOTOR	0.052000			
4. REMOVE IMPELLAR NUT FROM SHAFT	0.033000			
5. REMOVE SEAL ASSEMBLY	0.019000			
6. INSPECT BEARING BRACKETS FACE	0.005000			
7. CLEAN BEARING	0.016000			
8. INSPECT SHAFT	0.005000			
9. CLEAN SHAFT	0.017000			
10. INSTALL NEW SEAL AND RUBBER	0.013000			
11. INSTALL SEAL SPRING AND WASHERS	0.006000			
12. INSTALL IMPELLAR NUT ON SHAFT	0.031000			
13. CLEAN PUMP BODY GASKET AREA	0.037000			
14. INSTALL NEW GASKET (READY MADE)	0.013000			
15. INSTALL IMPELLAR	0.009000			
16. INSTALL 4 STUD BOLTS	0.035000			
17. ASSEMBLE MOTOR TO BEARING	0.024000			
18. INSTALL 4 STUD BOLTS	0.027000			
19. TIGHTEN COUPLING	0.009000			
20. FINAL TIGHTENING OF BOLTS	0.027000			
21. TEST RUN	0.042000			

FREQUENCY OF OCCURRENCE

Zone	High	Average	Low
1	7.540	18.850	37.700
2	3.240	8.100	16.200
3	2.400	6.000	12.000
4	2.220	5.550	11.100
5	1.880	4.700	9.400
6	2.000	5.000	10.000
7	1.540	3.850	7.700
8	1.540	3.850	7.700
9	1.360	3.400	6.800
10	1.200	3.000	6.000
11	1.200	3.000	6.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.464000	0.139200	0.603200
Material Cost \$	32.820000		32.820000
Equipment Hours			0.603200

Components In This Task: _____

TASK DATA FORM

Task Code: 0994422

Component: 5 TON CHILLER ACH RECIP System: COOLING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.1092 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1. CHECK FOR LEAKS	0.008000	LUBRICANT	2 OZ	0.1300
2. CHECK PUMP OPERATION	0.009000			0.2600
3. LUBRICATE PUMP AND MOTOR	0.036000			
4. CHECK SUCTION AND DISCHARGE PRES	0.003000			
5. CHECK PACKING GLANDS, TIGHTEN	0.011000			
6. FILL OUT INSPECTION REPORT	0.017000			

FREQUENCY OF OCCURRENCE

Zone	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.084000	0.025200	0.109200
Material Cost \$	0.260000		0.260000
Equipment Hours			0.109200

Components In This Task: _____

TASK DATA FORM

Task Code: 0994423

Component: 5 TON CHILLER ACH RECIP System: COOLING GENERATION Subsystem: DIST. PIPING SYSTEM
 Task Description: REPLACE REPLACE CIRC. PUMP
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 7.8000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE PUMP, INSTALL NEW	12.000000	CIRC. PUMP	1 UNIT	1200.0000
				1200.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	56.550	75.400
2	16.200	24.300	32.400
3	12.000	18.000	24.000
4	11.100	16.650	22.200
5	9.400	14.100	18.800
6	10.000	15.000	20.000
7	7.700	11.550	15.400
8	7.700	11.550	15.400
9	6.800	10.200	13.600
10	6.000	9.000	12.000
11	6.000	9.000	12.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	12.000000	3.600000	15.600000
Material Cost \$	1200.000000		1200.000000
Equipment Hours			7.800000

Components In This Task: _____

TASK DATA FORM

Task Code: 09A1111

Component: MULTI-ZONE 6500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR MULTI-ZONE UNIT
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE FAN BEARINGS	1.200000	BEARINGS	2	10.2300
				20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.200	8.400	12.600
3	4.450	8.900	13.350
4	4.750	9.500	14.250
5	4.850	9.700	14.550
6	5.000	10.000	15.000
7	5.450	10.900	16.350
8	5.650	11.300	16.950
9	6.000	12.000	18.000
10	6.400	12.800	19.200
11	8.750	17.500	26.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	20.460000		20.460000
Equipment Hours			0.780000

Components In This Task: 09A1110

TASK DATA FORM

Task Code: 09A1112

Component: MULTI-ZONE 6500 CFM

System: HEAT/COOL GENERATION

Subsystem: EQUIPMENT

Task Description: PM

PREVENTIVE MAINTENANCE

Unit of Measure: COUNT

Persons per Team: 2

Task Duration: 2.6000 hours

Trade: REFRIG./AIR COND.

Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEATING COIL	0.500000
4.SERVICE ZONE DAMPERS	0.100000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	2	10.3400
		20.6800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.000000	1.200000	5.200000
Material Cost \$	20.680000		20.680000
Equipment Hours			2.600000

Components In This Task: 09A1110

TASK DATA FORM

Task Code: 09A1113

Component: MULTI-ZONE 6500 CFM

System: HEAT/COOL GENERATION

Subsystem: EQUIPMENT

Task Description: PM

PREVENTIVE MAINTENANCE

Unit of Measure: COUNT

Persons per Team: 1

Task Duration: 0.6500 hours

Trade: REFRIG./AIR COND.

Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.500000

Material Resources

Description	Quantity	Unit Cost
FILTERS	9	1.6400
		14.7600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	14.760000		14.760000
Equipment Hours			0.650000

Components In This Task: 09A1110

TASK DATA FORM

Task Code: 09A1114

Component: MULTI-ZONE 6500 CFM

System: HEAT/COOL GENERATION

Subsystem: EQUIPMENT

Task Description: REPLACE REPLACE MULTI-ZONE UNIT

Unit of Measure: COUNT

Persons per Team: 4 Task Duration: 9.1000 hours

Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE MULTI-ZONE	28.000000	M.ZONE UNIT	1	5658.0000
				5658.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	8.400	12.600	16.800
3	8.900	13.350	17.800
4	9.500	14.250	19.000
5	9.700	14.550	19.400
6	10.000	15.000	20.000
7	10.900	16.350	21.800
8	11.300	16.950	22.600
9	12.000	18.000	24.000
10	12.800	19.200	25.600
11	17.500	26.250	35.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	28.000000	8.400000	36.400000
Material Cost \$	5658.000000		5658.000000
Equipment Hours			9.100000

Components In This Task: 09A1110

TASK DATA FORM

Task Code: 09A1121

Component: MULTI-ZONE 10,000 CFM

System: HEAT/COOL GENERATION

Subsystem: EQUIPMENT

Task Description: M/R REPAIR MULTI-ZONE UNIT

Unit of Measure: COUNT

Persons per Team: 2 Task Duration: 0.7800 hours

Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE FAN BEARINGS	1.200000	BEARINGS	2	10.2300
				20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.200	8.400	12.600
3	4.450	8.900	13.350
4	4.750	9.500	14.250
5	4.850	9.700	14.550
6	5.000	10.000	15.000
7	5.450	10.900	16.350
8	5.650	11.300	16.950
9	6.000	12.000	18.000
10	6.400	12.800	19.200
11	8.750	17.500	26.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	20.460000		20.460000
Equipment Hours			0.780000

Components In This Task: 09A1120

TASK DATA FORM

Task Code: 09A1122

Component: MULTI-ZONE 10,000 CFM

System: HEAT/COOL GENERATION

Subsystem: EQUIPMENT

Task Description: PM PREVENTIVE MAINTENANCE

Unit of Measure: COUNT

Persons per Team: 2 Task Duration: 2.6000 hours

Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEATING COIL	0.500000
4.SERVICE ZONE DAMPERS	0.100000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	2	10.3000
		20.6000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.000000	1.200000	5.200000
Material Cost \$	20.600000		20.600000
Equipment Hours			2.600000

Components In This Task: 09A1120

TASK DATA FORM

Task Code: 09A1123

Component: MULTI-ZONE 10,000 CFM

System: HEAT/COOL GENERATION

Subsystem: EQUIPMENT

Task Description: PM PREVENTIVE MAINTENANCE

Unit of Measure: COUNT

Persons per Team: 1 Task Duration: 0.6500 hours

Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISP FILTERS	0.500000

Material Resources

Description	Quantity	Unit Cost
FILTERS	12	1.6400
		19.6800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	19.680000		19.680000
Equipment Hours			0.650000

Components In This Task: 09A1120

TASK DATA FORM

Task Code: 09A1124

Component: MULTI-ZONE 10,000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE MULTI-ZONE UNIT
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 10.7250 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE MULTI-ZONE	33.000000	M.ZONE UNIT	1	7595.0000
				7595.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	8.400	12.600	16.800
3	8.900	13.350	17.800
4	9.500	14.250	19.000
5	9.700	14.550	19.400
6	10.000	15.000	20.000
7	10.900	16.350	21.800
8	11.300	16.950	22.600
9	12.000	18.000	24.000
10	12.800	19.200	25.600
11	17.500	26.250	35.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	33.000000	9.900000	42.900000
Material Cost \$	7595.000000		7595.000000
Equipment Hours			10.725000

Components In This Task: 09A1120

TASK DATA FORM

Task Code: 09A1131

Component: MULTI-ZONE 25,000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR MULTI-ZONE 25,000 CFM UNIT
 Unit of Measure: COUNT
 Persons per Team: 3 Task Duration: 0.5200 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE FAN BEARING	1.200000	BEARINGS	2	25.0000
				50.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.200	8.400	12.600
3	4.450	8.900	13.350
4	4.750	9.500	14.250
5	4.850	9.700	14.550
6	5.000	10.000	15.000
7	5.450	10.900	16.350
8	5.650	11.300	16.950
9	6.000	12.000	18.000
10	6.400	12.800	19.200
11	8.750	17.500	26.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	50.000000		50.000000
Equipment Hours			0.520000

Components In This Task: 09A1130

TASK DATA FORM

Task Code: 09A1132

Component: MULTI-ZONE 25,000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.6000 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEATING COIL	0.500000
4.SERVICE ZONE DAMPERS	0.100000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	3	21.1800
		63.5400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.000000	1.200000	5.200000
Material Cost \$	63.540000		63.540000
Equipment Hours			2.600000

Components In This Task: 09A1130

TASK DATA FORM

Task Code: 09A1133

Component: MULTI-ZONE 25,000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.600000

Material Resources

Description	Quantity	Unit Cost
FILTERS	16	1.6800
		26.8800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.600000	0.180000	0.780000
Material Cost \$	26.880000		26.880000
Equipment Hours			0.780000

Components In This Task: 09A1130

TASK DATA FORM

Task Code: 09A1134

Component: MULTI-ZONE 25,000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE MULTI-ZONE UNIT
 Unit of Measure: COUNY
 Persons per Team: 4 Task Duration: 18.8500 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description Labor Hrs
 T.REMOVE/REPLACE MULTI-ZONE 58.000000

Material Resources

Description Quantity Unit Cost
 M.ZONE UNIT 1 14490.0000
 14490.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	8.400	12.600	16.800
3	8.900	13.350	17.800
4	9.500	14.250	19.000
5	9.700	14.550	19.400
6	10.000	15.000	20.000
7	10.900	16.350	21.800
8	11.300	16.950	22.600
9	12.000	18.000	24.000
10	12.800	19.200	25.600
11	17.500	26.250	35.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	58.000000	17.400000	75.400000
Material Cost \$	14490.000000		14490.000000
Equipment Hours			18.850000

Components In This Task: 09A1130

TASK DATA FORM

Task Code: 09A1141

Component: MULTI-ZONE 50,000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR MULTI-ZONE UNIT
 Unit of Measure: COUNY
 Persons per Team: 3 Task Duration: 0.5200 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description Labor Hrs
 T.REMOVE/REPLACE FAN BEARING 1.200000

Material Resources

Description Quantity Unit Cost
 BEARINGS 2 50.0000
 100.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.200	8.400	12.600
3	4.450	8.900	13.350
4	4.750	9.500	14.250
5	4.850	9.700	14.550
6	5.000	10.000	15.000
7	5.450	10.900	16.350
8	5.650	11.300	16.950
9	6.000	12.000	18.000
10	6.400	12.800	19.200
11	8.750	17.500	26.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	100.000000		100.000000
Equipment Hours			0.520000

Components In This Task: 09A1140

TASK DATA FORM

Task Code: 09A1142

Component: MULTI-ZONE 50,000 CFM

System: HEAT/COOL GENERATION

Subsystem: EQUIPMENT

Task Description: PM PREVENTIVE MAINTENANCE

Unit of Measure: COUNT

Persons per Team: 2

Task Duration: 2.6000 hours

Trade: REFRIG./AIR COND.

Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEANS HEATING COIL	0.500000
4.SERVICE ZONE DAMPERS	0.100000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	3	21.1800
		63.5400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.000000	1.200000	5.200000
Material Cost \$	63.540000		63.540000
Equipment Hours			2.600000

Components In This Task: 09A1140

TASK DATA FORM

Task Code: 09A1143

Component: MULTI-ZONE 50,000 CFM

System: HEAT/COOL GENERATION

Subsystem: EQUIPMENT

Task Description: PM PREVENTIVE MAINTENANCE

Unit of Measure: COUNT

Persons per Team: 1

Task Duration: 0.9100 hours

Trade: REFRIG./AIR COND.

Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.700000

Material Resources

Description	Quantity	Unit Cost
FILTERS	20	1.6400
		32.8000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.700000	0.210000	0.910000
Material Cost \$	32.800000		32.800000
Equipment Hours			0.910000

Components In This Task: 09A1140

TASK DATA FORM

Task Code: 09A1144

Component: MULTI-ZONE 50,000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE MULTI-ZONE UNIT
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 26.3250 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE MULTI-ZONE	81.000000

Material Resources

Description	Quantity	Unit Cost
M. ZONE UNIT	1	25760.0000
		25760.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	8.400	12.600	16.800
3	8.900	13.350	17.800
4	9.500	14.250	19.000
5	9.700	14.550	19.400
6	10.000	15.000	20.000
7	10.900	16.350	21.800
8	11.300	16.950	22.600
9	12.000	18.000	24.000
10	12.800	19.200	25.600
11	17.500	26.250	35.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	81.000000	24.300000	105.300000
Material Cost \$	25760.000000		25760.000000
Equipment Hours			26.325000

Components In This Task: 09A1140

TASK DATA FORM

Task Code: 09A1151

Component: MULTI-ZONE 2500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR MULTI-ZONE UNIT
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN BEARINGS	1.200000

Material Resources

Description	Quantity	Unit Cost
BEARINGS	2	10.2300
		20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	20.460000		20.460000
Equipment Hours			0.720000

Components In This Task: 09A1150

TASK DATA FORM

Task Code: 09A1152Component: MULTI-ZONE 2500 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 2 Task Duration: 2.6000 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	3.300000	FAN BELTS	2	10.3400
2.REPLACE FAN BELTS	0.100000			20.6800
3.CLEAN HEATING COIL	0.500000			
4.SERVICE ZONE DAMPERS	0.100000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.000000	1.200000	5.200000
Material Cost \$	20.680000		20.680000
Equipment Hours			2.600000

Components In This Task: 09A1150

TASK DATA FORM

Task Code: 09A1153Component: MULTI-ZONE 2500 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 1 Task Duration: 0.6500 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE DISPOSABLE FILTERS	0.500000	FILTERS	6	1.6400
				9.8400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	9.840000		9.840000
Equipment Hours			0.650000

Components In This Task: 09A1150

TASK DATA FORM

Task Code: 09A1154

Component: MULTI-ZONE 2500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE MULTI-ZONE UNIT
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 6.5000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE MULTI-ZONE	20.000000

Material Resources

Description	Quantity	Unit Cost
M. ZONE UNIT	1	4000.0000
		4000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	20.000000	6.000000	26.000000
Material Cost \$	4000.000000		4000.000000
Equipment Hours			6.500000

Components In This Task: 09A1150

TASK DATA FORM

Task Code: 09A1211

Component: DUAL DUCT 6500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR DUAL DUCT UNIT
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE BEARING	1.200000

Material Resources

Description	Quantity	Unit Cost
BEARINGS	2	10.2300
		20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.200	8.400	12.600
3	4.450	8.900	13.350
4	4.750	9.500	14.250
5	4.850	9.700	14.550
6	5.000	10.000	15.000
7	5.450	10.900	16.350
8	5.650	11.300	16.950
9	6.000	12.000	18.000
10	6.400	12.800	19.200
11	8.750	17.500	26.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	20.460000		20.460000
Equipment Hours			0.780000

Components In This Task: 09A1210

TASK DATA FORM

Task Code: 09A1212

Component: DUAL DUCT 6500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	3.300000	FAN BELTS	2	10.3400
2.REPLACE FAN BELTS	0.100000			20.6800
3.CLEAN HEATING COIL	0.500000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	20.680000		20.680000
Equipment Hours			2.535000

Components In This Task: 09A1210

TASK DATA FORM

Task Code: 09A1213

Component: DUAL DUCT 6500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE DISPOSABLE FILTERS	0.500000	FILTERS	9	1.6400
				14.7600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	14.760000		14.760000
Equipment Hours			0.650000

Components In This Task: 09A1210

TASK DATA FORM

Task Code: 09A1214

Component: DUAL DUCT 6500 CFM

System: HEAT/COOL GENERATION

Subsystem: EQUIPMENT

Task Description: REPLACE REPLACE DUAL DUCT UNIT

Unit of Measure: COUNT

Persons per Team: 4

Task Duration: 9.1000 hours

Trade: REFRIG./AIR COND.

Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE DUAL DUCT UNIT	28.000000	D.DUCT UNIT	1	5658.0000
				5658.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	8.400	12.600	16.800
3	8.900	13.350	17.800
4	9.500	14.250	19.000
5	9.700	14.550	19.400
6	10.000	15.000	20.000
7	10.900	16.350	21.800
8	11.300	16.950	22.600
9	12.000	18.000	24.000
10	12.800	19.200	25.600
11	17.500	26.250	35.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	28.000000	8.400000	36.400000
Material Cost \$	5658.000000		5658.000000
Equipment Hours			9.100000

Components In This Task: 09A1210

TASK DATA FORM

Task Code: 09A1221

Component: DUAL DUCT 10,000 CFM

System: HEAT/COOL GENERATION

Subsystem: EQUIPMENT

Task Description: M/R REPAIR DUAL DUCT UNIT

Unit of Measure: COUNT

Persons per Team: 2

Task Duration: 0.7800 hours

Trade: REFRIG./AIR COND.

Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE FAN BEARING	1.200000	BEARINGS	2	10.2300
				20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.200	8.400	12.600
3	4.450	8.900	13.350
4	4.750	9.500	14.250
5	4.850	9.700	14.550
6	5.000	10.000	15.000
7	5.450	10.900	16.350
8	5.650	11.300	16.950
9	6.000	12.000	18.000
10	6.400	12.800	19.200
11	8.750	17.500	26.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	20.460000		20.460000
Equipment Hours			0.780000

Components In This Task: 09A1220

TASK DATA FORM

Task Code: 09A1222

Component: DUAL DUCT 10,000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	3.300000	FAN BELTS	2	10.3400
2.REPLACE FAN BELTS	0.100000			20.6800
3.CLEAN HEATING COIL	0.500000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	20.680000		20.680000
Equipment Hours			2.535000

Components In This Task: 09A1220

TASK DATA FORM

Task Code: 09A1223

Component: DUAL DUCT 10,000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE DISPOSABLE FILTERS	0.500000	FILTERS	12	1.6400
				19.6800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	19.680000		19.680000
Equipment Hours			0.650000

Components In This Task: 09A1220

TASK DATA FORM

Task Code: 09A1224Component: DUAL DUCT 10,000 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: REPLACE REPLACE DUAL DUCT UNITUnit of Measure: COUNTPersons per Team: 4 Task Duration: 10.7250 hoursTrade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE DUAL DUCT UNIT	33.000000

Material Resources

Description	Quantity	Unit Cost
D. DUCT UNIT	1	7595.0000
		7595.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	8.400	12.600	16.800
3	8.900	13.350	17.800
4	9.500	14.250	19.000
5	9.700	14.550	19.400
6	10.000	15.000	20.000
7	10.900	16.350	21.800
8	11.300	16.950	22.600
9	12.000	18.000	24.000
10	12.800	19.200	25.600
11	17.500	26.250	35.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	33.000000	9.900000	42.900000
Material Cost \$	7595.000000		7595.000000
Equipment Hours			10.725000

Components In This Task: 09A1220

TASK DATA FORM

Task Code: 09A1231Component: DUAL DUCT 25,000 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: M/R REPAIR DUAL DUCT UNITUnit of Measure: COUNTPersons per Team: 3 Task Duration: 0.5200 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN BEARINGS	1.200000

Material Resources

Description	Quantity	Unit Cost
BEARINGS	2	25.0000
		50.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.200	8.400	12.600
3	4.450	8.900	13.350
4	4.750	9.500	14.250
5	4.850	9.700	14.550
6	5.000	10.000	15.000
7	5.450	10.900	16.350
8	5.650	11.300	16.950
9	6.000	12.000	18.000
10	6.400	12.800	19.200
11	8.750	17.500	26.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	50.000000		50.000000
Equipment Hours			0.520000

Components In This Task: 09A1230

TASK DATA FORM

Task Code: 09A1232Component: DUAL DUCT 25,000 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: PMPREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 2Task Duration: 2.5350 hoursTrade: REFRIG./AIR COND.Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEANS HEATING COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	3	21.1800
		63.5400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	63.540000		63.540000
Equipment Hours			2.535000

Components In This Task: 09A1230

TASK DATA FORM

Task Code: 09A1233Component: DUAL DUCT 25,000 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: PMPREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 1Task Duration: 0.7800 hoursTrade: REFRIG./AIR COND.Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.600000

Material Resources

Description	Quantity	Unit Cost
FILTERS	16	1.6400
		26.2400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.600000	0.180000	0.780000
Material Cost \$	26.240000		26.240000
Equipment Hours			0.780000

Components In This Task: 09A1230

TASK DATA FORM

Task Code: 09A1234Component: DUAL DUCT 25,000 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: REPLACE REPLACE DUAL DUCT UNITUnit of Measure: COUNTPersons per Team: 4Task Duration: 18.8500 hoursTrade: REFRIG./AIR COND.Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE DUAL DUCT UNIT	58.000000

Material Resources

Description	Quantity	Unit Cost
D. DUCT UNIT	1	14490.0000
		14490.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	8.400	12.600	16.800
3	8.900	13.350	17.800
4	9.500	14.250	19.000
5	9.700	14.550	19.400
6	10.000	15.000	20.000
7	10.900	16.350	21.800
8	11.300	16.950	22.600
9	12.000	18.000	24.000
10	12.800	19.200	25.600
11	17.500	26.250	35.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	58.000000	17.400000	75.400000
Material Cost \$	14490.000000		14490.000000
Equipment Hours			18.850000

Components In This Task: 09A1230

TASK DATA FORM

Task Code: 09A1241Component: DUAL DUCT 50,000 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: M/R REPAIR DUAL DUCT UNITUnit of Measure: COUNTPersons per Team: 3Task Duration: 0.5200 hoursTrade: REFRIG./AIR COND.Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN BEARINGS	1.200000

Material Resources

Description	Quantity	Unit Cost
BEARINGS	2	50.0000
		100.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.200	8.400	12.600
3	4.450	8.900	13.350
4	4.750	9.500	14.250
5	4.850	9.700	14.550
6	5.000	10.000	15.000
7	5.450	10.900	16.350
8	5.650	11.300	16.950
9	6.000	12.000	18.000
10	6.400	12.800	19.200
11	8.750	17.500	26.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	100.000000		100.000000
Equipment Hours			0.520000

Components In This Task: 09A1240

TASK DATA FORM

Task Code: 09A1242Component: DUAL DUCT 50,000 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 2 Task Duration: 2.5350 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEANS HEATING COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	3	21.1800
		63.5400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	63.540000		63.540000
Equipment Hours			2.535000

Components In This Task: 09A1240

TASK DATA FORM

Task Code: 09A1243Component: DUAL DUCT 50,000 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 1 Task Duration: 0.9100 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.700000

Material Resources

Description	Quantity	Unit Cost
FILTERS	20	1.6400
		32.8000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.700000	0.210000	0.910000
Material Cost \$	32.800000		32.800000
Equipment Hours			0.910000

Components In This Task: 09A1240

TASK DATA FORM

Task Code: 09A1244Component: DUAL DUCT 50,000 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: REPLACE REPLACE DUAL DUCT UNITUnit of Measure: COUNTPersons per Team: 4Task Duration: 26.3250 hoursTrade: REFRIG./AIR COND.Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE DUAL DUCT UNIT	81.000000

Material Resources

Description	Quantity	Unit Cost
D. DUCT UNIT	1	25760.0000
		25760.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.800
2	8.400	12.600	16.800
3	8.900	13.350	17.800
4	9.500	14.250	19.000
5	9.700	14.550	19.400
6	10.000	15.000	20.000
7	10.900	16.350	21.800
8	11.300	16.950	22.600
9	12.000	18.000	24.000
10	12.800	19.200	25.600
11	17.500	26.250	35.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	81.000000	24.300000	105.300000
Material Cost \$	25760.000000		25760.000000
Equipment Hours			26.325000

Components In This Task: 09A1240

TASK DATA FORM

Task Code: 09A1311Component: 3 DK.MULTI ZONE 6500 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: M/R REPAIR MULTI-ZONE UNITUnit of Measure: COUNTPersons per Team: 2Task Duration: 0.7800 hoursTrade: REFRIG./AIR COND.Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN BEARINGS	1.200000

Material Resources

Description	Quantity	Unit Cost
BEARINGS	2	10.2200
		20.4400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.200	8.400	12.600
3	4.450	8.900	13.350
4	4.750	9.500	14.250
5	4.850	9.700	14.550
6	5.000	10.000	15.000
7	5.450	10.900	16.350
8	5.650	11.300	16.950
9	6.000	12.000	18.000
10	6.400	12.800	19.200
11	8.750	17.500	26.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	20.440000		20.440000
Equipment Hours			0.780000

Components In This Task: 09A1310

TASK DATA FORM

Task Code: 09A1312

Component: 3 DK.MULTI ZONE 6500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.6000 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEATING COIL	0.500000
4.SERVICE ZONE DAMPERS	0.100000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	2	10.3400
		20.6800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.000000	1.200000	5.200000
Material Cost \$	20.680000		20.680000
Equipment Hours			2.600000

Components In This Task: 09A1310

TASK DATA FORM

Task Code: 09A1313

Component: 3 DK.MULTI ZONE 6500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.500000

Material Resources

Description	Quantity	Unit Cost
FILTERS	9	1.6400
		14.7600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	14.760000		14.760000
Equipment Hours			0.650000

Components In This Task: 09A1310

TASK DATA FORM

Task Code: 09A1314

Component: 3 DK.MULTI ZONE 6500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE MULTI-ZONE UNIT
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 8.1250 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE MULTI-ZONE	25.000000	M. ZONE UNIT		5658.0000
				5658.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	8.400	12.600	16.800
3	8.900	13.350	17.800
4	9.500	14.250	19.000
5	9.700	14.550	19.400
6	10.000	15.000	20.000
7	10.900	16.350	21.800
8	11.300	16.950	22.600
9	12.000	18.000	24.000
10	12.800	19.200	25.600
11	17.500	26.250	35.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	25.000000	7.500000	32.500000
Material Cost \$	5658.000000		5658.000000
Equipment Hours			8.125000

Components In This Task: 09A1310

TASK DATA FORM

Task Code: 09A1321

Component: 3 DK.MULTI ZONE 10,000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR MULTI-ZONE UNIT
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE FAN BEARINGS	1.200000	BEARINGS	2	10.2300
				20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.200	8.400	12.600
3	4.450	8.900	13.350
4	4.750	9.500	14.250
5	4.850	9.700	14.550
6	5.000	10.000	15.000
7	5.450	10.900	16.350
8	5.650	11.300	16.950
9	6.000	12.000	18.000
10	6.400	12.800	19.200
11	8.750	17.500	26.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	20.460000		20.460000
Equipment Hours			0.780000

Components In This Task: 09A1320

TASK DATA FORM

Task Code: 09A1322

Component: 3 DK.MULTI ZONE 10,000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.6000 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEATING COIL	0.500000
4.SERVICE ZONE DAMPERS	0.100000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	2	10.3400
		20.6800

FREQUENCY OF OCCURRENCE

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.000000	1.200000	5.200000
Material Cost \$	20.680000		20.680000
Equipment Hours			2.600000

Components In This Task: 09A1320

TASK DATA FORM

Task Code: 09A1323

Component: 3 DK.MULTI ZONE 10,000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.500000

Material Resources

Description	Quantity	Unit Cost
FILTERS	12	1.6400
		19.6800

FREQUENCY OF OCCURRENCE

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	19.680000		19.680000
Equipment Hours			0.650000

Components In This Task: 09A1320

TASK DATA FORM

Task Code: 09A1324

Component: 3 DK.MULTI ZONE 10,000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE MULTI-ZONE UNIT
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 10.7250 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Material Resources

Subtask Description Labor Hrs
 T.REMOVE/REPLACE MULTI-ZONE 33.000000

Description Quantity Unit Cost
 M. ZONE UNIT 1 7595.0000
 7595.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	8.400	12.600	16.800
3	8.900	13.350	17.800
4	9.500	14.250	19.000
5	9.700	14.550	19.400
6	10.000	15.000	20.000
7	10.900	16.350	21.800
8	11.300	16.950	22.600
9	12.000	18.000	24.000
10	12.800	19.200	25.600
11	17.500	26.250	35.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	33.000000	9.900000	42.900000
Material Cost \$	7595.000000		7595.000000
Equipment Hours			10.725000

Components In This Task: 09A1320

TASK DATA FORM

Task Code: 09A1331

Component: 3 DK.MULTI ZONE 25,000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR MULTI-ZONE UNIT
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Material Resources

Subtask Description Labor Hrs
 T.REMOVE/REPLACE FAN BEARINGS 1.200000

Description Quantity Unit Cost
 BEARINGS 2 50.0000
 50.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.200	8.400	12.600
3	4.450	8.900	13.350
4	4.750	9.500	14.250
5	4.850	9.700	14.550
6	5.000	10.000	15.000
7	5.450	10.900	16.350
8	5.650	11.300	16.950
9	6.000	12.000	18.000
10	6.400	12.800	19.200
11	8.750	17.500	26.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	50.000000		50.000000
Equipment Hours			0.780000

Components In This Task: 09A1330

TASK DATA FORM

Task Code: 09A1332

Component: 3 DK.MULTI ZONE 25,000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.6000 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEATING COIL	0.500000
4.SERVICE ZONE DAMPERS	0.100000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	2	21.1800
		42.3600

Zone	FREQUENCY OF OCCURRENCE		Low
	High	Average	
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.000000	1.200000	5.200000
Material Cost \$	42.360000		42.360000
Equipment Hours			2.600000

Components In This Task: 009A130

TASK DATA FORM

Task Code: 09A1333

Component: 3 DK.MULTI ZONE 25,000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.600000

Material Resources

Description	Quantity	Unit Cost
FILTERS	16	1.6400
		26.2400

Zone	FREQUENCY OF OCCURRENCE		Low
	High	Average	
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.600000	0.180000	0.780000
Material Cost \$	26.240000		26.240000
Equipment Hours			0.780000

Components In This Task: 09A1330

TASK DATA FORM

Task Code: 09A1334

Component: 3 DK.MULTI ZONE 25,000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE MULTI-ZONE UNIT
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 18.8500 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE MULTI-ZONE	58.000000	M. ZONE UNIT	1	14490.0000
				14490.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	8.700	12.600	16.800
3	8.900	13.350	17.800
4	9.500	14.250	19.000
5	9.700	14.550	19.400
6	10.000	15.000	20.000
7	10.900	16.350	21.800
8	11.300	16.950	22.600
9	12.000	18.000	24.000
10	12.800	19.200	25.600
11	17.500	26.250	35.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	58.000000	17.400000	75.400000
Material Cost \$		14490.000000		14490.000000
Equipment	Hours			18.850000

Components In This Task: 09A1330

TASK DATA FORM

Task Code: 09A1341

Component: 3 DK.MULTI ZONE 50,000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR MULTI-ZONE UNIT
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE FAN BEARINGS	1.200000	BEARINGS	2	50.0000
				100.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.200	8.400	12.600
3	4.450	8.900	13.350
4	4.750	9.500	14.250
5	4.850	9.700	14.550
6	5.000	10.000	15.000
7	5.450	10.900	16.350
8	5.650	11.300	16.950
9	6.000	12.000	18.000
10	6.400	12.800	19.200
11	8.750	17.500	26.250

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	1.200000	0.360000	1.560000
Material Cost \$		100.000000		100.000000
Equipment	Hours			0.780000

Components In This Task: 09A1340

TASK DATA FORM

Task Code: 09A1342Component: 3 DK.MULTI ZONE 50,000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 2 Task Duration: 2.6000 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEATING COIL	0.500000
4.SERVICE ZONE DAMPERS	0.100000

Description	Quantity	Unit Cost
FAN BELTS	2	21.800
		42.3600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.000000	1.200000	5.200000
Material Cost \$	42.360000		42.360000
Equipment Hours			2.600000

Components In This Task: 09A1340

TASK DATA FORM

Task Code: 09A1343Component: 3 DK.MULTI ZONE 50,000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 1 Task Duration: 0.9100 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.700000

Description	Quantity	Unit Cost
FILTERS	20	1.6800
		33.6000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.333	0.333	0.333
2	0.333	0.333	0.333
3	0.333	0.333	0.333
4	0.333	0.333	0.333
5	0.333	0.333	0.333
6	0.333	0.333	0.333
7	0.333	0.333	0.333
8	0.333	0.333	0.333
9	0.333	0.333	0.333
10	0.333	0.333	0.333
11	0.333	0.333	0.333

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.700000	0.210000	0.910000
Material Cost \$	33.600000		33.600000
Equipment Hours			0.910000

Components In This Task: 09A1340

TASK DATA FORM

Task Code: 09A1344Component: 3 DK. MULTI ZONE 50,000 CFM System: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: REPLACE REPLACE MULTI-ZONE UNITUnit of Measure: COUNTPersons per Team: 4 Task Duration: 26.3250 hoursTrade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1. REMOVE/REPLACE MULTI-ZONE	81.000000

Material Resources

Description	Quantity	Unit Cost
M. ZONE UNIT	1	25760.0000
		25760.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.500
2	8.400	12.600	16.800
3	8.900	13.350	17.800
4	9.500	14.250	19.000
5	9.700	14.550	19.400
6	10.000	15.000	20.000
7	10.900	16.350	21.800
8	11.300	16.950	22.600
9	12.000	18.000	24.000
10	12.800	19.200	25.600
11	17.500	26.250	35.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	81.000000	24.300000	105.300000
Material Cost \$	25760.000000		25760.000000
Equipment Hours			26.325000

Components In This Task: 09A1340

TASK DATA FORM

Task Code: 09A1411Component: D.D. VARI. VOL. 6500 CFM System: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: M/R REPAIR DUAL DUCT VARIABLE VOLUME SYSTEMSUnit of Measure: COUNTPersons per Team: 2 Task Duration: 0.7800 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1. REMOVE/REPLACE FAN BEARINGS	1.200000

Material Resources

Description	Quantity	Unit Cost
BEARINGS	2	10.2300
		20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.200	8.400	12.600
3	4.450	8.900	13.350
4	4.750	9.500	14.250
5	4.850	9.700	14.550
6	5.000	10.000	15.000
7	5.450	10.900	16.350
8	5.650	11.300	16.950
9	6.000	12.000	18.000
10	6.400	12.800	19.200
11	8.750	17.500	26.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	20.460000		20.460000
Equipment Hours			0.780000

Components In This Task: 09A1410

TASK DATA FORM

Task Code: 09A1412

Component: D.D. VARI.VOL. 6500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PH PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEATING COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	2	10.3400
		20.6800

Zone	FREQUENCY OF OCCURRENCE		Low
	High	Average	
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	20.680000		20.680000
Equipment Hours			2.535000

Components In This Task: 09A1410

TASK DATA FORM

Task Code: 09A1413

Component: D.D. VARI.VOL. 6500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PH PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.3250 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.500000

Material Resources

Description	Quantity	Unit Cost
FILTERS	9	1.6400
		14.7600

Zone	FREQUENCY OF OCCURRENCE		Low
	High	Average	
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	14.760000		14.760000
Equipment Hours			0.325000

Components In This Task: 09A1410

TASK DATA FORM

Task Code: 09A1414Component: D.D. VARI.VOL. 6500 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: REPLACE REPLACE DUAL DUCT VARIABLE VOLUME UNITUnit of Measure: COUNTPersons per Team: 4Task Duration: 9.7500 hoursTrade: REFRIG./AIR COND.Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE DUAL DUCT UNIT	30.000000

Material Resources

Description	Quantity	Unit Cost
D. DUCT UNIT	1	6200.0000
		6200.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	8.400	12.600	16.800
3	8.900	13.350	17.800
4	9.500	14.250	19.000
5	9.700	14.550	19.400
6	10.000	15.000	20.000
7	10.900	16.350	21.800
8	11.300	16.950	22.600
9	12.000	18.000	24.000
10	12.800	19.200	25.600
11	17.500	26.250	35.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	30.000000	9.000000	39.000000
Material Cost \$	6200.000000		6200.000000
Equipment Hours			9.750000

Components In This Task: 09A1410

TASK DATA FORM

Task Code: 09A1421Component: D.D. VARI.VOL.10000 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: M/R REPAIR DUAL DUCT VARIABLE VOLUME UNITUnit of Measure: COUNTPersons per Team: 2Task Duration: 0.7800 hoursTrade: REFRIG./AIR COND.Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN BEARINGS	1.200000

Material Resources

Description	Quantity	Unit Cost
BEARINGS	2	10.2300
		20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.200	8.400	12.600
3	4.450	8.900	13.350
4	4.750	9.500	14.250
5	4.850	9.700	14.550
6	5.000	10.000	15.000
7	5.450	10.900	16.350
8	5.650	11.300	16.950
9	6.000	12.000	18.000
10	6.400	12.800	19.200
11	8.750	17.500	26.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	20.460000		20.460000
Equipment Hours			0.780000

Components In This Task: 09A1420

TASK DATA FORM

Task Code: 09A1422

Component: D.D. VARI.VOL.10000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEATING COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	2	10.3400
		20.6800

FREQUENCY OF OCCURRENCE

Zone	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	20.680000		20.680000
Equipment Hours			2.535000

Components In This Task: 09A1420

TASK DATA FORM

Task Code: 09A1423

Component: D.D. VARI.VOL.10000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.3250 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.500000

Material Resources

Description	Quantity	Unit Cost
FILTERS	12	1.6400
		19.6800

FREQUENCY OF OCCURRENCE

Zone	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	19.680000		19.680000
Equipment Hours			0.325000

Components In This Task: 09A1420

TASK DATA FORM

Task Code: 09A1424

Component: D.D. VARI.VOL.10000 CFM

System: HEAT/COOL GENERATION

Subsystem: EQUIPMENT

Task Description: REPLACE REPLACE DUAL DUCT VARIABLE VOLUME UNIT

Unit of Measure: COUNT

Persons per Team: 4

Task Duration: 11.7000 hours

Trade: REFRIG./AIR COND.

Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE DUAL DUCT UNIT	36.000000

Material Resources

Description	Quantity	Unit Cost
D. DUCT UNIT	1	8400.0000
		8400.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	8.400	12.600	16.800
3	8.900	13.350	17.800
4	9.500	14.250	19.000
5	9.700	14.550	19.400
6	10.000	15.000	20.000
7	10.900	16.350	21.800
8	11.300	16.950	22.600
9	12.000	18.000	24.000
10	12.800	19.200	25.600
11	17.500	26.250	35.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	36.000000	10.800000	46.800000
Material Cost \$	8400.000000		8400.000000
Equipment Hours			11.700000

Components In This Task: 09A1420

TASK DATA FORM

Task Code: 09A1431

Component: D.D. VARI.VOL.25000 CFM

System: HEAT/COOL GENERATION

Subsystem: EQUIPMENT

Task Description: M/R REPAIR DUAL DUCT VARIABLE VOLUME UNIT

Unit of Measure: COUNT

Persons per Team: 2

Task Duration: 0.7800 hours

Trade: REFRIG./AIR COND.

Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN BEARINGS	1.200000

Material Resources

Description	Quantity	Unit Cost
BEARINGS	2	21.1800
		42.3600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.200	8.400	12.600
3	4.450	8.900	13.350
4	4.750	9.500	14.250
5	4.850	9.700	14.550
6	5.000	10.000	15.000
7	5.450	10.900	16.350
8	5.650	11.300	16.950
9	6.000	12.000	18.000
10	6.400	12.800	19.200
11	8.750	17.500	26.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	42.360000		42.360000
Equipment Hours			0.780000

Components In This Task: 09A1431

TASK DATA FORM

Task Code: 09A1432

Component: D.D. VARI.VOL.25000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	3.300000	FAN BELTS	5	21.1800
2.REPLACE FAN BELTS	0.100000			63.5400
3.CLEAN HEATING COIL	0.500000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	63.540000		63.540000
Equipment Hours			2.535000

Components In This Task: 09A1430

TASK DATA FORM

Task Code: 09A1433

Component: D.D. VARI.VOL.25000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.3900 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE DISPOSABLE FILTERS	0.600000	FILTERS	16	1.6400
				26.2400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.600000	0.180000	0.780000
Material Cost \$	26.240000		26.240000
Equipment Hours			0.390000

Components In This Task: 09A1430

TASK DATA FORM

Task Code: 09A1434

Component: D.D. VARI.VOL.25000 CFM System: HEAT/COOL GENERATION
 Task Description: REPLACE REPLACE DUAL DUCT VARIABLE VOLUME UNIT
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 20.8000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Subsystem: EQUIPMENT

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE DUAL DUCT UNIT	64.000000

Material Resources

Description	Quantity	Unit Cost
D. DUCT UNIT	1	16000.0000
		16000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	8.400	12.600	16.800
3	8.900	13.350	17.800
4	9.500	14.250	19.000
5	9.700	14.550	19.400
6	10.000	15.000	20.000
7	10.900	16.350	21.800
8	11.300	16.950	22.600
9	12.000	18.000	24.000
10	12.800	19.200	25.600
11	17.500	26.250	35.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	64.000000	19.200000	83.200000
Material Cost \$	16000.000000		16000.000000
Equipment Hours			20.800000

Components In This Task: 09A1430

TASK DATA FORM

Task Code: 09A1441

Component: D.D. VARI.VOL.50000 CFM System: HEAT/COOL GENERATION
 Task Description: M/R REPAIR DUAL DUCT VARIABLE VOLUME UNIT
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Subsystem: EQUIPMENT

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN BEARINGS	1.200000

Material Resources

Description	Quantity	Unit Cost
BEARINGS	2	21.1800
		42.3600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.200	8.400	12.600
3	4.450	8.900	13.350
4	4.750	9.500	14.250
5	4.850	9.700	14.550
6	5.000	10.000	15.000
7	5.450	10.900	16.350
8	5.650	11.300	16.950
9	6.000	12.000	18.000
10	6.400	12.800	19.200
11	8.750	17.500	26.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	42.360000		42.360000
Equipment Hours			0.780000

Components In This Task: 09A1440

TASK DATA FORM

Task Code: 09A1442

Component: D.D. VARI.VOL.50000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEATING COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	3	21.1800
		63.5400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	63.540000		63.540000
Equipment Hours			2.535000

Components In This Task: 09A1440

TASK DATA FORM

Task Code: 09A1443

Component: D.D. VARI.VOL.50000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.4550 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.700000

Material Resources

Description	Quantity	Unit Cost
FILTERS	20	1.6400
		32.8000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.700000	0.210000	0.910000
Material Cost \$	32.800000		32.800000
Equipment Hours			0.455000

Components In This Task: 09A1440

TASK DATA FORM

Task Code: 09A1444

Component: D.D. VARI.VOL.50000 CFM

System: HEAT/COOL GENERATION

Subsystem: EQUIPMENT

Task Description: REPLACE REPLACE DUAL DUCT VARIABLE VOLUME UNIT

Unit of Measure: COUNT

Persons per Team: 4

Task Duration: 28.9250 hours

Trade: REFRIG./AIR COND.

Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE DUAL DUCT UNIT	89.000000

Material Resources

Description	Quantity	Unit Cost
D. DUCT UNIT	1	28000.0000
		28000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	8.400	12.600	16.800
3	8.900	13.350	17.800
4	9.500	14.250	19.000
5	9.700	14.550	19.400
6	10.000	15.000	20.000
7	10.900	16.350	21.800
8	11.300	16.950	22.600
9	12.000	18.000	24.000
10	12.800	19.200	25.600
11	17.500	26.250	35.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	89.000000	26.700000	115.700000
Material Cost \$	28000.000000		28000.000000
Equipment Hours			28.925000

Components In This Task: 09A1440

TASK DATA FORM

Task Code: 09A1451

Component: D.D. VARI.VOL. 100,000CFM

System: HEAT/COOL GENERATION

Subsystem: EQUIPMENT

Task Description: H/R REPAIR DUAL DUCT VARIABLE VOLUME UNIT

Unit of Measure: COUNT

Persons per Team: 4

Task Duration: 0.3900 hours

Trade: REFRIG./AIR COND.

Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE FAN BEARINGS	1.200000

Material Resources

Description	Quantity	Unit Cost
BEARINGS	2	48.0000
		96.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	96.000000		96.000000
Equipment Hours			0.390000

Components In This Task: 09A1450

TASK DATA FORM

Task Code: 09A1452Component: D.D. VARI.VOL. 100,000CFM System: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 2 Task Duration: 2.5350 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEATING COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	4	21.1800
		84.7200

Zone	FREQUENCY OF OCCURRENCE		Low
	High	Average	
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	84.720000		84.720000
Equipment Hours			2.535000

Components In This Task: 09A1450

TASK DATA FORM

Task Code: 09A1453Component: D.D. VARI.VOL. 100,000CFM System: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 2 Task Duration: 0.4550 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.700000

Material Resources

Description	Quantity	Unit Cost
FILTERS	38	1.6400
		62.3200

Zone	FREQUENCY OF OCCURRENCE		Low
	High	Average	
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.700000	0.210000	0.910000
Material Cost \$	62.320000		62.320000
Equipment Hours			0.455000

Components In This Task: 09A1450

TASK DATA FORM

Task Code: 09A1454

Component: D.D. VARI.VOL. 100,000CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE DUAL DUCT VARIABLE VOLUME UNIT
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 42.2500 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE DUAL DUCT UNIT	130.000000

Material Resources

Description	Quantity	Unit Cost
D. DUCT UNIT	1	46000.0000
		46000.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	130.000000	39.000000	169.000000
Material Cost \$	46000.000000		46000.000000
Equipment Hours			42.250000

Components In This Task: 09A1450

TASK DATA FORM

Task Code: 09A1511

Component: VARIABLE VOLUME 6500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR VARIABLE VOLUME UNIT
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN BEARINGS	1.200000

Material Resources

Description	Quantity	Unit Cost
BEARINGS	2	10.2300
		20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.200	8.400	12.600
3	4.450	8.900	13.350
4	4.750	9.500	14.250
5	4.850	9.700	14.550
6	5.000	10.000	15.000
7	5.450	10.900	16.350
8	5.650	11.300	16.950
9	6.000	12.000	18.000
10	6.400	12.800	19.200
11	8.750	17.500	26.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	20.460000		20.460000
Equipment Hours			0.780000

Components In This Task: 09A1510

TASK DATA FORM

Task Code: 09A1512

Component: VARIABLE VOLUME 6500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 5.0700 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEATING COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	2	10.3400
		20.6800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	20.680000		20.680000
Equipment Hours			5.070000

Components In This Task: 09A1510

TASK DATA FORM

Task Code: 09A1513

Component: VARIABLE VOLUME 6500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.500000

Material Resources

Description	Quantity	Unit Cost
FILTERS	9	1.6400
		14.7600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	14.760000		14.760000
Equipment Hours			0.650000

Components In This Task: 09A1510

TASK DATA FORM

Task Code: 09A1514

Component: VARIABLE VOLUME 6500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE VARIABLE VOLUME UNIT
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 8.1250 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources	
Subtask Description	Labor Hrs	Description	Quantity
T.REMOVE/REPLACE VARI VOL. UNIT	25.000000	V. VOL. UNIT	1
			Unit Cost
			5658.0000
			5658.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	8.400	12.600	16.800
3	8.900	13.350	17.800
4	9.500	14.250	19.000
5	9.700	14.550	19.400
6	10.000	15.000	20.000
7	10.900	16.350	21.800
8	11.300	16.950	22.600
9	12.000	18.000	24.000
10	12.800	19.200	25.600
11	17.500	26.250	35.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	25.000000	7.500000	32.500000
Material Cost \$		5658.000000		5658.000000
Equipment	Hours			8.125000

Components In This Task: 09A1510

TASK DATA FORM

Task Code: 09A1521

Component: VARIABLE VOLUME 10000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR VARIABLE VOLUME UNIT
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources	
Subtask Description	Labor Hrs	Description	Quantity
T.REMOVE/REPLACE FAN BEARINGS	1.200000	BEARINGS	2
			Unit Cost
			10.2300
			20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.200	8.400	12.600
3	4.450	8.900	13.350
4	4.750	9.500	14.250
5	4.850	9.700	14.550
6	5.000	10.000	15.000
7	5.450	10.900	16.350
8	5.650	11.300	16.950
9	6.000	12.000	18.000
10	6.400	12.800	19.200
11	8.750	17.500	26.250

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	1.200000	0.260000	1.560000
Material Cost \$		20.460000		20.460000
Equipment	Hours			0.780000

Components In This Task: 09A1520

TASK DATA FORM

Task Code: 09A1522

Component: VARIABLE VOLUME 10000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	3.300000	FAN BELTS	2	10.3400
2.REPLACE FAN BELTS	0.100000			20.6800
3.CLEAN HEATING COIL	0.500000			

Zone	FREQUENCY OF OCCURRENCE		Low
	High	Average	
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	20.680000		20.680000
Equipment Hours			2.535000

Components In This Task: 09A1520

TASK DATA FORM

Task Code: 09A1523

Component: VARIABLE VOLUME 10000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE DISPOSABLE FILTERS	0.500000	FILTERS	12	1.6400
				19.6800

Zone	FREQUENCY OF OCCURRENCE		Low
	High	Average	
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	19.680000		19.680000
Equipment Hours			0.650000

Components In This Task: 09A1520

TASK DATA FORM

Task Code: 09A1524

Component: VARIABLE VOLUME 10000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE VARIABLE VOLUME UNIT
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 10.7250 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description Labor Hrs
 1.REMOVE/REPLACE VART VOLUME UNIT 33.000000

Material Resources

Description Quantity Unit Cost
 V. VOL. UNIT 1 7595.0000
 7595.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	8.400	12.600	16.800
3	8.900	13.350	17.800
4	9.500	14.250	19.000
5	9.700	14.550	19.400
6	10.000	15.000	20.000
7	10.900	16.350	21.800
8	11.300	16.950	22.600
9	12.000	18.000	24.000
10	12.800	19.200	25.600
11	17.500	26.250	35.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	33.000000	9.900000	42.900000
Material Cost \$	7595.000000		7595.000000
Equipment Hours			10.725000

Components In This Task: 09A1520

TASK DATA FORM

Task Code: 09A1531

Component: VARIABLE VOLUME 25000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR VARIABLE VOLUME UNIT
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description Labor Hrs
 1.REMOVE/REPLACE FAN BEARINGS 1.200000

Material Resources

Description Quantity Unit Cost
 FAN BEARINGS 2 25.0000
 50.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.200	8.400	12.600
3	4.450	8.900	13.350
4	4.750	9.500	14.250
5	4.850	9.700	14.550
6	5.000	10.000	15.000
7	5.450	10.900	16.350
8	5.650	11.300	16.950
9	6.000	12.000	18.000
10	6.400	12.800	19.200
11	8.750	17.500	26.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	50.000000		50.000000
Equipment Hours			0.780000

Components In This Task: 09A1530

TASK DATA FORM

Task Code: 09A1532

Component: VARIABLE VOLUME 25000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	3.300000	FAN BELTS	3	27.1800
2.REPLACE FAN BELTS	0.100000			63.5400
3.CLEAN HEATING COIL	0.500000			

Zone	FREQUENCY OF OCCURRENCE		Low
	High	Average	
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	63.540000		63.540000
Equipment Hours			2.535000

Components In This Task: 09A1530

TASK DATA FORM

Task Code: 09A1533

Component: VARIABLE VOLUME 25000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE DISPOSABLE FILTERS	0.600000	FILTERS	16	1.6400
				26.2400

Zone	FREQUENCY OF OCCURRENCE		Low
	High	Average	
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.600000	0.180000	0.780000
Material Cost \$	26.240000		26.240000
Equipment Hours			0.780000

Components In This Task: 09A1530

TASK DATA FORM

Task Code: 09A1534

Component: VARIABLE VOLUME 25000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE VARIABLE VOLUME UNIT
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 18.8500 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE VARI VOLUME UNIT	58.000000	V. VOL. UNIT	1	14490.0000
				14490.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	8.400	12.600	16.800
3	8.900	13.350	17.800
4	9.500	14.250	19.000
5	9.700	14.550	19.400
6	10.000	15.000	20.000
7	10.900	16.350	21.800
8	11.300	16.950	22.600
9	12.000	18.000	24.000
10	12.800	19.200	25.600
11	17.500	26.250	35.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	58.000000	17.400000	75.400000
Material Cost \$	14490.000000		14490.000000
Equipment Hours			18.850000

Components In This Task: 09A1530

TASK DATA FORM

Task Code: 09A1541

Component: VARIABLE VOLUME 50000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR VARIABLE VOLUME UNIT
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE FAN BEARINGS	1.200000	FAN BEARINGS	2	50.0000
				100.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.200	8.400	12.600
3	4.450	8.900	13.350
4	4.750	9.500	14.250
5	4.850	9.700	14.550
6	5.000	10.000	15.000
7	5.450	10.900	16.350
8	5.650	11.300	16.950
9	6.000	12.000	18.000
10	6.400	12.800	19.200
11	8.750	17.500	26.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	100.000000		100.000000
Equipment Hours			0.780000

Components In This Task: 09A1540

TASK DATA FORM

Task Code: 09A1542

Component: VARIABLE VOLUME 50000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PH PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEATING COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	3	21.1800
		63.5400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	5.900000	1.170000	5.070000
Material Cost \$	63.540000		63.540000
Equipment Hours			2.535000

Components In This Task: 09A1540

TASK DATA FORM

Task Code: 09A1543

Component: VARIABLE VOLUME 50000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PH PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.9100 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.700000

Material Resources

Description	Quantity	Unit Cost
FILTERS	20	1.6400
		32.8000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.333	0.333	0.333
2	0.333	0.333	0.333
3	0.333	0.333	0.333
4	0.333	0.333	0.333
5	0.333	0.333	0.333
6	0.333	0.333	0.333
7	0.333	0.333	0.333
8	0.333	0.333	0.333
9	0.333	0.333	0.333
10	0.333	0.333	0.333
11	0.333	0.333	0.333

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.700000	0.210000	0.910000
Material Cost \$	32.800000		32.800000
Equipment Hours			0.910000

Components In This Task: 09A1540

TASK DATA FORM

Task Code: 09A1544

Component: VARIABLE VOLUME 50000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE VARIABLE VOLUME UNIT
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 26.3250 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE VARI VOL. UNIT	81.000000

Material Resources

Description	Quantity	Unit Cost
V. VOL. UNIT	1	25760.0000
		25760.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	8.400	12.600	16.800
3	8.900	13.350	17.800
4	9.500	14.250	19.000
5	9.700	14.550	19.400
6	10.000	15.000	20.000
7	10.900	16.350	21.800
8	11.300	16.950	22.600
9	12.000	18.000	24.000
10	12.800	19.200	25.600
11	17.500	26.250	35.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	81.000000	24.300000	105.300000
Material Cost \$	25760.000000		25760.000000
Equipment Hours			26.325000

Components In This Task: 09A1540

TASK DATA FORM

Task Code: 09A1611

Component: TERM. REHEAT 6500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR TERMINAL REHEAT UNIT
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN BRGS.	1.200000

Material Resources

Description	Quantity	Unit Cost
BEARINGS	2	10.2300
		20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	21.050	42.100	63.150
2	9.400	18.800	28.200
3	6.600	13.200	19.800
4	6.200	12.400	18.600
5	5.400	10.800	16.200
6	5.000	10.000	15.000
7	4.400	8.800	13.200
8	4.150	8.300	12.450
9	3.850	7.700	11.550
10	3.600	7.200	10.800
11	3.650	7.300	10.950

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	20.460000		20.460000
Equipment Hours			0.780000

Components In This Task: 09A1610

TASK DATA FORM

Task Code: 09A1612

Component: TERM. REHEAT 6500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	3.300000	FAN BELTS	2	10.3400
2.REPLACE FAN BELTS	0.100000			20.6800
3.CLEAN HEAT COIL	0.500000			

Zone	FREQUENCY OF OCCURRENCE		Low
	High	Average	
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	3.900000	1.170000	5.070000
Material	Cost \$	20.680000		20.680000
Equipment	Hours			2.535000

Components In This Task: 09A1610

TASK DATA FORM

Task Code: 09A1613

Component: TERM. REHEAT 6500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE DISPOSABLE FILTERS	0.500000	FILTERS	9	1.6400
				14.7600

Zone	FREQUENCY OF OCCURRENCE		Low
	High	Average	
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.500000	0.150000	0.650000
Material	Cost \$	14.760000		14.760000
Equipment	Hours			0.650000

Components In This Task: 09A1610

TASK DATA FORM

Task Code: 09A1614Component: TERM. REHEAT 6500 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: REPLACE REPLACE TERMINAL REHEAT UNITUnit of Measure: COUNTPersons per Team: 4 Task Duration: 8.1250 hoursTrade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE TERM REHEAT UNIT	25.000000	T.REH. UNIT	1	4037.0000
				4037.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	42.100	63.150	84.200
2	18.800	28.200	37.600
3	13.200	19.800	26.400
4	12.400	18.600	24.800
5	10.800	16.200	21.600
6	10.000	15.000	20.000
7	8.800	13.200	17.600
8	8.300	12.450	16.600
9	7.700	11.550	15.400
10	7.200	10.800	14.400
11	7.300	10.950	14.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	25.000000	7.500000	32.500000
Material Cost \$	4037.000000		4037.000000
Equipment Hours			8.125000

Components In This Task: 09A1610

TASK DATA FORM

Task Code: 09A1621Component: TERM. REHEAT 10000 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: M/R REPAIR TERMINAL REHEAT UNITUnit of Measure: COUNTPersons per Team: 2 Task Duration: 0.7800 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE FAN BRGS.	1.200000	BEARINGS	2	10.2300
				20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	21.050	42.100	63.150
2	9.400	18.800	28.200
3	6.600	13.200	19.800
4	6.200	12.400	18.600
5	5.400	10.800	16.200
6	5.000	10.000	15.000
7	4.400	8.800	13.200
8	4.150	8.300	12.450
9	3.850	7.700	11.550
10	3.600	7.200	10.800
11	3.650	7.300	10.950

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	20.460000		20.460000
Equipment Hours			0.780000

Components In This Task: 09A1620

TASK DATA FORM

Task Code: 09A1622

Component: TERM. REHEAT 10000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEAT COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	2	10.3400
		20.6800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	20.680000		20.680000
Equipment Hours			2.535000

Components In This Task: 09A1620

TASK DATA FORM

Task Code: 09A1623

Component: TERM. REHEAT 10000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.500000

Material Resources

Description	Quantity	Unit Cost
FILTERS	12	1.6400
		19.6800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	19.680000		19.680000
Equipment Hours			0.650000

Components In This Task: 09A1620

TASK DATA FORM

Task Code: 09A1624Component: TERM. REHEAT 10000 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: REPLACE REPLACE TERMINAL REHEAT UNITUnit of Measure: COUNTPersons per Team: 4 Task Duration: 9.4250 hoursTrade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE TERM REHEAT UNIT	29.000000

Material Resources

Description	Quantity	Unit Cost
T.REH. UNIT	1	5832.0000
		5832.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	42.100	63.150	84.200
2	18.800	28.200	37.600
3	13.200	19.800	26.400
4	12.400	18.600	24.800
5	10.800	16.200	21.600
6	10.000	15.000	20.000
7	8.800	13.200	17.600
8	8.300	12.450	16.600
9	7.700	11.550	15.400
10	7.200	10.800	14.400
11	7.300	10.950	14.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	29.000000	8.700000	37.700000
Material Cost \$	5832.000000		5832.000000
Equipment Hours			9.425000

Components In This Task: 09A1620

TASK DATA FORM

Task Code: 09A1631Component: TERM. REHEAT 25000 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: M/R REPAIR TERMINAL REHEAT UNITUnit of Measure: COUNTPersons per Team: 2 Task Duration: 0.7800 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN BRGS.	1.200000

Material Resources

Description	Quantity	Unit Cost
BEARINGS	2	25.0000
		50.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	21.050	42.100	63.150
2	9.400	18.800	28.200
3	6.600	13.200	19.800
4	6.200	12.400	18.600
5	5.400	10.800	16.200
6	5.000	10.000	15.000
7	4.400	8.800	13.200
8	4.150	8.300	12.450
9	3.850	7.700	11.550
10	3.600	7.200	10.800
11	3.650	7.300	10.950

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	50.000000		50.000000
Equipment Hours			0.780000

Components In This Task: 09A1630

TASK DATA FORM

Task Code: 09A1632Component: TERM. REHEAT 25000 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: PMPREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 2Task Duration: 2.5350 hoursTrade: REFRIG./AIR COND.Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEAT COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	3	21.1800
		63.5400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	63.540000		63.540000
Equipment Hours			2.535000

Components In This Task: 09A1630

TASK DATA FORM

Task Code: 09A1633Component: TERM. REHEAT 25000 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: PMPREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 1Task Duration: 0.7800 hoursTrade: REFRIG./AIR COND.Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.600000

Material Resources

Description	Quantity	Unit Cost
FILTERS	16	1.6400
		26.2400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.600000	0.180000	0.780000
Material Cost \$	26.240000		26.240000
Equipment Hours			0.780000

Components In This Task: 09A1630

TASK DATA FORM

Task Code: 09A1634

Component: TERM. REHEAT 25000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE TERMINAL REHEAT UNIT
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 17.8750 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE TERM REHEAT UNIT	55.000000	T.REH. UNIT	1	14410.0000
				14410.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	42.100	63.150	84.200
2	18.800	28.200	37.600
3	13.200	19.800	26.400
4	12.400	18.600	24.800
5	10.800	16.200	21.600
6	10.000	15.000	20.000
7	8.800	13.200	17.600
8	8.300	12.450	16.600
9	7.700	11.550	15.400
10	7.200	10.800	14.400
11	7.300	10.950	14.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	55.000000	16.500000	71.500000
Material Cost \$	14410.000000		14410.000000
Equipment Hours			17.875000

Components In This Task: 09A1630

TASK DATA FORM

Task Code: 09A1641

Component: TERM. REHEAT 50000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: H/R REPAIR TERMINAL REHEAT UNIT
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE FAN BRGS.	1.200000	BEARINGS	2	50.0000
				100.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	21.050	42.100	63.150
2	9.400	18.800	28.200
3	6.600	13.200	19.800
4	6.200	12.400	18.600
5	5.400	10.800	16.200
6	5.000	10.000	15.000
7	4.400	8.800	13.200
8	4.150	8.300	12.450
9	3.850	7.700	11.550
10	3.600	7.200	10.800
11	3.650	7.300	10.950

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	100.000000		100.000000
Equipment Hours			0.780000

Components In This Task: 09A1640

TASK DATA FORM

Task Code: 09A1642

Component: TERM. REHEAT 50000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEAT COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	5	21.1800
		63.5400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	63.540000		63.540000
Equipment Hours			2.535000

Components In This Task: 09A1640

TASK DATA FORM

Task Code: 09A1643

Component: TERM. REHEAT 50000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.9100 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.700000

Material Resources

Description	Quantity	Unit Cost
FILTERS	20	1.6400
		32.8000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.700000	0.210000	0.910000
Material Cost \$	32.800000		32.800000
Equipment Hours			0.910000

Components In This Task: 09A1640

TASK DATA FORM

Task Code: 09A1644

Component: TERM. REHEAT 50000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE TERMINAL REHEAT UNIT
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 28.2750 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE TERM REHEAT UNIT	87.000000	T. REH. UNIT	1	21560.0000
				21560.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	42.100	63.150	84.200
2	18.800	28.200	37.600
3	13.200	19.800	26.400
4	12.400	18.600	24.800
5	10.800	16.200	21.600
6	10.000	15.000	20.000
7	8.800	13.200	17.600
8	8.300	12.450	16.600
9	7.700	11.550	15.400
10	7.200	10.800	14.400
11	7.300	10.950	14.600

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	87.000000	26.100000	113.100000
Material	Cost \$	21560.000000		21560.000000
Equipment	Hours			28.275000

Components In This Task: 09A1640

TASK DATA FORM

Task Code: 09A1711

Component: 2 PIPE INDUCTION 6500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: H/R REPAIR 2 PIPE INDUCTION UNIT
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE FAN BRGS.	1.200000	BEARINGS	2	10.2300
				20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	21.050	42.100	63.150
2	9.400	18.800	28.200
3	6.600	13.200	19.800
4	6.200	12.400	18.600
5	5.400	10.800	16.200
6	5.000	10.000	15.000
7	4.400	8.800	13.200
8	4.150	8.300	12.450
9	3.850	7.700	11.550
10	3.600	7.200	10.800
11	3.650	7.300	10.950

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	1.200000	0.360000	1.560000
Material	Cost \$	20.460000		20.460000
Equipment	Hours			0.780000

Components In This Task: 09A1710

TASK DATA FORM

Task Code: 09A1712

Component: 2 PIPE INDUCTION 6500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEAT COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	2	10.3400
		20.6800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	20.680000		20.680000
Equipment Hours			2.535000

Components In This Task: 09A1710

TASK DATA FORM

Task Code: 09A1713

Component: 2 PIPE INDUCTION 6500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.500000

Material Resources

Description	Quantity	Unit Cost
FILTERS	9	1.6400
		14.7600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	14.760000		14.760000
Equipment Hours			0.650000

Components In This Task: 09A1710

TASK DATA FORM

Task Code: 09A1714

Component: 2 PIPE INDUCTION 6500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE 2 PIPE INDUCTION UNIT
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 8.1250 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE INDUCTION UNIT	25.000000

Material Resources

Description	Quantity	Unit Cost
INDUCT. UNIT	1	4037.0000
		4037.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	42.100	63.150	84.200
2	18.800	28.200	37.600
3	13.200	19.800	26.400
4	12.400	18.600	24.800
5	10.800	16.200	21.600
6	10.000	15.000	20.000
7	8.800	13.200	17.600
8	8.300	12.450	16.600
9	7.700	11.550	15.400
10	7.200	10.800	14.400
11	7.300	10.950	14.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	25.000000	7.500000	32.500000
Material Cost \$	4037.000000		4037.000000
Equipment Hours			8.125000

Components In This Task: 09A1710

TASK DATA FORM

Task Code: 09A1721

Component: 2 PIPE INDUCTION 10000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR 2 PIPE INDUCTION UNIT
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN BEARINGS	1.200000

Material Resources

Description	Quantity	Unit Cost
BEARINGS	2	10.2300
		20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	21.050	42.100	63.150
2	9.400	18.800	28.200
3	6.600	13.200	19.800
4	6.200	12.400	18.600
5	5.400	10.800	16.200
6	5.000	10.000	15.000
7	4.400	8.800	13.200
8	4.150	8.300	12.450
9	3.850	7.700	11.550
10	3.600	7.200	10.800
11	3.650	7.300	10.950

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	20.460000		20.460000
Equipment Hours			0.780000

Components In This Task: 09A1720

TASK DATA FORM

Task Code: 09A1722

Component: 2 PIPE INDUCTION 10000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEAT COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	2	10.3400
		20.6800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	20.680000		20.680000
Equipment Hours			2.535000

Components In This Task: 09A1720

TASK DATA FORM

Task Code: 09A1723

Component: 2 PIPE INDUCTION 10000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.500000

Material Resources

Description	Quantity	Unit Cost
FILTERS	12	1.6400
		19.6800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	19.680000		19.680000
Equipment Hours			0.650000

Components In This Task: 09A1720

TASK DATA FORM

Task Code: 09A1724

Component: 2 PIPE INDUCTION 10000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE 2 PIPE INDUCTION UNIT
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 9.4250 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Material Resources

Subtask Description Labor Hrs
 T.REMOVE/REPLACE INDUCTION UNIT 29.000000

Description Quantity Unit Cost
 INDUCY. UNIT 1 5832.0000
 5832.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	42.100	63.150	84.200
2	18.800	28.200	37.600
3	13.200	19.800	26.400
4	12.400	18.600	24.800
5	10.800	16.200	21.600
6	10.000	15.000	20.000
7	8.800	13.200	17.600
8	8.300	12.450	16.600
9	7.700	11.550	15.400
10	7.200	10.800	14.400
11	7.300	10.950	14.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	29.000000	8.700000	37.700000
Material Cost \$	5832.000000		5832.000000
Equipment Hours			9.425000

Components In This Task: 09A1720

TASK DATA FORM

Task Code: 09A1731

Component: 2 PIPE INDUCTION 25000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR 2 PIPE INDUCTION UNITS
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Material Resources

Subtask Description Labor Hrs
 T.REMOVE/REPLACE FAN BEARINGS 1.200000

Description Quantity Unit Cost
 BEARINGS 2 25.0000
 50.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	21.050	42.100	63.150
2	9.400	18.800	29.140
3	6.600	13.200	20.460
4	6.200	12.400	19.220
5	5.400	10.800	16.740
6	5.000	10.000	15.500
7	4.400	8.800	13.640
8	4.150	8.300	12.665
9	3.850	7.700	11.935
10	3.600	7.200	11.160
11	3.650	7.300	11.315

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.560000	1.760000
Material Cost \$	50.000000		50.000000
Equipment Hours			0.780000

Components In This Task: 09A1730

TASK DATA FORM

Task Code: 09A1732

Component: 2 PIPE INDUCTION 25000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEAT COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	3	21.1800
		63.5400

FREQUENCY OF OCCURRENCE

Zone	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	63.540000		63.540000
Equipment Hours			2.535000

Components In This Task: 09A1730

TASK DATA FORM

Task Code: 09A1733

Component: 2 PIPE INDUCTION 25000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.600000

Material Resources

Description	Quantity	Unit Cost
FILTERS	16	1.6400
		26.2400

FREQUENCY OF OCCURRENCE

Zone	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.600000	0.180000	0.780000
Material Cost \$	26.240000		26.240000
Equipment Hours			0.780000

Components In This Task: 09A1730

TASK DATA FORM

Task Code: 09A1734

Component: 2 PIPE INDUCTION 25000 CFM System: HEAT/COOL GENERATION

Subsystem: EQUIPMENT

Task Description: REPLACE REPLACE 2 PIPE INDUCTION UNIT

Unit of Measure: COUNT

Persons per Team: 4 Task Duration: 17.8750 hours

Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE INDUCTION UNIT	55.000000

Material Resources

Description	Quantity	Unit Cost
INDUCT. UNIT	1	14410.0000
		14410.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	42.100	62.150	84.200
2	18.800	28.200	37.600
3	13.200	19.800	26.400
4	12.400	18.600	24.800
5	10.800	16.200	21.600
6	10.000	15.000	20.000
7	8.800	13.200	17.600
8	8.300	12.450	16.600
9	7.700	11.550	15.400
10	7.200	10.800	14.400
11	7.300	10.950	14.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	55.000000	16.500000	71.500000
Material Cost \$	14410.000000		14410.000000
Equipment Hours			17.875000

Components In This Task: 09A1730

TASK DATA FORM

Task Code: 09A1741

Component: 2 PIPE INDUCTION 50000 CFM System: HEAT/COOL GENERATION

Subsystem: EQUIPMENT

Task Description: R/R REPAIR 2 PIPE INDUCTION UNIT

Unit of Measure: COUNT

Persons per Team: 2 Task Duration: 0.7800 hours

Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE FAN BEARINGS	1.200000

Material Resources

Description	Quantity	Unit Cost
BEARINGS	2	50.0000
		100.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	27.050	42.100	63.150
2	9.400	18.800	28.200
3	6.600	13.200	19.800
4	6.200	12.400	18.600
5	5.400	10.800	16.200
6	5.000	10.000	15.000
7	4.400	8.800	13.200
8	4.150	8.300	12.450
9	3.850	7.700	11.550
10	3.600	7.200	10.800
11	3.650	7.300	10.950

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	100.000000		100.000000
Equipment Hours			0.780000

Components In This Task: 09A1740

TASK DATA FORM

Task Code: 09A1742

Component: 2 PIPE INDUCTION 50000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEAT COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	3	21.1800
		63.5400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	63.540000		63.540000
Equipment Hours			2.535000

Components In This Task: 09A1740

TASK DATA FORM

Task Code: 09A1743

Component: 2 PIPE INDUCTION 50000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.9100 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.700000

Material Resources

Description	Quantity	Unit Cost
FILTERS	20	1.6400
		32.8000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.700000	0.210000	0.910000
Material Cost \$	32.800000		32.800000
Equipment Hours			0.910000

Components In This Task: 09A1740

TASK DATA FORM

Task Code: 09A1744

Component: 2 PIPE INDUCTION 50000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE 2 PIPE INDUCTION UNIT
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 28.2750 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE INDUCTION UNIT	87.000000	INDUCT. UNIT	1	21560.0000
				21560.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	42.100	63.150	84.200
2	18.800	28.200	37.600
3	13.200	19.800	26.400
4	12.400	18.600	24.800
5	10.800	16.200	21.600
6	10.000	15.000	20.000
7	8.800	13.200	17.600
8	8.300	12.450	16.600
9	7.700	11.550	15.400
10	7.200	10.800	14.400
11	7.300	10.950	14.600

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	87.000000	26.100000	113.100000
Material Cost \$		21560.000000		21560.000000
Equipment	Hours			28.275000

Components In This Task: 09A1740

TASK DATA FORM

Task Code: 09A1811

Component: 4 PIPE INDUCTION 6500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR 4 PIPE INDUCTION UNIT
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE FAN BEARINGS	1.200000	BEARINGS	2	10.2300
				20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	37.700	56.550
2	8.100	16.200	24.300
3	6.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	1.200000	0.360000	1.560000
Material Cost \$		20.460000		20.460000
Equipment	Hours			0.780000

Components In This Task: 09A1810

TASK DATA FORM

Task Code: 09A1812

Component: 4 PIPE INDUCTION 6500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	5.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEAT COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	2	10.3200
		20.6400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	5.900000	1.170000	5.070000
Material Cost \$	20.640000		20.640000
Equipment Hours			2.535000

Components In This Task: 09A1810

TASK DATA FORM

Task Code: 09A1813

Component: 4 PIPE INDUCTION 6500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.500000

Material Resources

Description	Quantity	Unit Cost
FILTERS	9	1.6000
		14.7600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	14.760000		14.760000
Equipment Hours			0.650000

Components In This Task: 09A1810

TASK DATA FORM

Task Code: 09A1814

Component: 4 PIPE INDUCTION 6500 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE 4 PIPE INDUCTION UNIT
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 8.1250 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE INDUCTION UNIT	25.000000	INDUCT. UNIT	1	4037.0000
				4037.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	25.000000	7.500000	32.500000
Material Cost \$	4037.000000		4037.000000
Equipment Hours			8.125000

Components In This Task: 09A1810

TASK DATA FORM

Task Code: 09A1821

Component: 4 PIPE INDUCTION 10000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR 4 PIPE INDUCTION UNIT
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE FAN BEARINGS	1.200000	BEARINGS	2	10.2300
				20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.560000	1.560000
Material Cost \$	20.460000		20.460000
Equipment Hours			0.780000

Components In This Task: 09A1820

TASK DATA FORM

Task Code: 09A1822

Component: 4 PIPE INDUCTION 10000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEAT COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	2	10.3400
		20.6800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	20.680000		20.680000
Equipment Hours			2.535000

Components In This Task: 09A1820

TASK DATA FORM

Task Code: 09A1823

Component: 4 PIPE INDUCTION 10000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.500000

Material Resources

Description	Quantity	Unit Cost
FILTERS	12	1.6400
		19.6800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	19.680000		19.680000
Equipment Hours			0.650000

Components In This Task: 09A1820

TASK DATA FORM

Task Code: 09A1824

Component: 4 PIPE INDUCTION 10000 CFM System: HEAT/COOL GENERATION

Subsystem: EQUIPMENT

Task Description: REPLACE REPLACE 4 PIPE INDUCTION UNIT

Unit of Measure: COUNT

Persons per Team: 4 Task Duration: 9.4250 hours

Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE INDUCTION UNIT	29.000000

Material Resources

Description	Quantity	Unit Cost
INDUCT. UNIT	1	5832.0000
		5832.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	29.000000	8.700000	37.700000
Material Cost \$	5832.000000		5832.000000
Equipment Hours			9.425000

Components In This Task: 09A1820

TASK DATA FORM

Task Code: 09A1831

Component: 4 PIPE INDUCTION 25000 CFM System: HEAT/COOL GENERATION

Subsystem: EQUIPMENT

Task Description: M/R REPAIR 4 PIPE INDUCTION UNIT

Unit of Measure: COUNT

Persons per Team: 2 Task Duration: 0.7800 hours

Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN BEARINGS	1.200000

Material Resources

Description	Quantity	Unit Cost
BEARINGS	2	25.0000
		50.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	50.000000		50.000000
Equipment Hours			0.780000

Components In This Task: 09A1830

TASK DATA FORM

Task Code: 09A1832

Component: 4 PIPE INDUCTION 25000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	3.500000	FAN BELTS	3	21.7800
2.REPLACE FAN BELTS	0.100000			53.5400
3.CLEAN HEAT COIL	0.500000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	63.540000		63.540000
Equipment Hours			2.535000

Components In This Task: 09A1830

TASK DATA FORM

Task Code: 09A1833

Component: 4 PIPE INDUCTION 25000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE DISPOSABLE FILTERS	0.600000	FILTERS	16	1.6400
				26.2400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.600000	0.180000	0.780000
Material Cost \$	26.240000		26.240000
Equipment Hours			0.780000

Components In This Task: 09A1630

TASK DATA FORM

Task Code: 09A1834

Component: 4 PIPE INDUCTION 25000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE 4 PIPE INDUCTION UNIT
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 17.8750 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE INDUCTION UNIT	55.000000	INDUCT. UNIT	1	14410.0000
				14410.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	55.000000	16.500000	71.500000
Material Cost \$	14410.000000		14410.000000
Equipment Hours			17.875000

Components In This Task: 09A1830

TASK DATA FORM

Task Code: 09A1841

Component: 4 PIPE INDUCTION 50000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR 4 PIPE INDUCTION UNIT
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE FAN BEARINGS	1.200000	BEARINGS	2	50.0000
				100.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	6.600	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	100.000000		100.000000
Equipment Hours			0.780000

Components In This Task: 09A1840

TASK DATA FORM

Task Code: 09A1842

Component: 4 PIPE INDUCTION 50000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEAT COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	3	21.1800
		63.5400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	63.540000		63.540000
Equipment Hours			2.535000

Components In This Task: 09A1840

TASK DATA FORM

Task Code: 09A1843

Component: 4 PIPE INDUCTION 50000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.9100 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.700000

Material Resources

Description	Quantity	Unit Cost
FILTERS	20	1.6400
		32.8000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.700000	0.210000	0.910000
Material Cost \$	32.800000		32.800000
Equipment Hours			0.910000

Components In This Task: 09A1840

TASK DATA FORM

Task Code: 09A1844

Component: 4 PIPE INDUCTION 50000 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE 4 PIPE INDUCTION UNIT
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 28.2750 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE INDUCTION UNIT	87.000000	INDUCT. UNIT	1	21560.0000
				21560.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resource	UOM	Direct	Indirect	Total
Labor	Hours	87.000000	26.100000	113.100000
Material	Cost \$	21560.000000		21560.000000
Equipment	Hours			28.275000

Components in This Task: 09A1840

TASK DATA FORM

Task Code: 09A1911

Component: 2 PIPE FAN COIL 200 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR FAN COIL UNIT
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.5600 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE FAN MOTOR	1.200000	MOTOR	1	50.0000
				50.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.800	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resource	UOM	Direct	Indirect	Total
Labor	Hours	1.200000	0.360000	1.560000
Material	Cost \$	50.000000		50.000000
Equipment	Hours			1.560000

Components in This Task: 09A1910

TASK DATA FORM

Task Code: 09A1912

Component: 2 PIPE FAN COIL 200 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.CLEAN COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.500000	0.150000	0.650000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			0.650000

Components In This Task: 09A1910

TASK DATA FORM

Task Code: 09A1913

Component: 2 PIPE FAN COIL 200 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.1300 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REPLACE FILTER	0.100000

Material Resources

Description	Quantity	Unit Cost
FILTER	1	2.0000
		2.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.100000	0.030000	0.130000
Material	Cost \$	2.000000		2.000000
Equipment	Hours			0.130000

Components In This Task: 09A1910

TASK DATA FORM

Task Code: 09A1914

Component: 2 PIPE FAN COIL 200 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE FAN COIL UNIT
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 1.3000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description Labor Hrs
 1.REMOVE/REPLACE FAN COIL UNIT 2.000000

Material Resources

Description	Quantity	Unit Cost
F. COIL UNIT	1	575.0000
		575.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	2.000000	0.600000	2.600000
Material	Cost \$	575.000000		575.000000
Equipment	Hours			1.300000

Components In This Task: 09A1910

TASK DATA FORM

Task Code: 09A1921

Component: 2 PIPE FAN COIL 400 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR FAN COIL UNIT
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.5600 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description Labor Hrs
 1.REMOVE/REPLACE FAN MOTOR 1.200000

Material Resources

Description	Quantity	Unit Cost
MOTOR	1	50.0000
		50.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.300	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	1.200000	0.360000	1.560000
Material	Cost \$	50.000000		50.000000
Equipment	Hours			1.560000

Components In This Task: 09A1920

TASK DATA FORM

Task Code: 09A1922

Component: 2 PIPE FAN COIL 400 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.CLEAN COIL	0.500000			0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.650000

Components In This Task: 09A1920

TASK DATA FORM

Task Code: 09A1923

Component: 2 PIPE FAN COIL 400 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.1300 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE FILTER	0.100000	FILTER	1	2.0000 2.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.100000	0.030000	0.130000
Material Cost \$	2.000000		2.000000
Equipment Hours			0.130000

Components In This Task: 09A1920

TASK DATA FORM

Task Code: 09A1924

Component: 2 PIPE FAN COIL 400 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE FAN COIL UNIT
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 1.3000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE FAN COIL UNIT	2.000000	F. COIL UNIT	1	655.0000
				655.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.000000	0.600000	2.600000
Material Cost \$	655.000000		655.000000
Equipment Hours			1.300000

Components In This Task: 09A1920

TASK DATA FORM

Task Code: 09A1931

Component: 2 PIPE FAN COIL 600 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: H/R REPAIR FAN COIL UNIT
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.5600 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE FAN MOTOR	1.200000	MOTOR	1	50.0000
				50.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	6.600	8.800
2	4.800	7.200	9.600
3	7.600	11.400	15.200
4	7.400	11.100	14.800
5	9.800	14.700	19.600
6	5.000	7.500	10.000
7	16.050	24.075	32.100
8	23.200	34.800	46.400
9	22.800	34.200	45.600
10	29.250	43.875	58.500
11	96.150	144.225	192.300

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	50.000000		50.000000
Equipment Hours			1.560000

Components In This Task: 09A1930

TASK DATA FORM

Task Code: 09A1932

Component: 2 PIPE FAN COIL 600 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.CLEAN COIL	0.500000			0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.500000	0.150000	0.650000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			0.650000

Components In This Task: 09A1930

TASK DATA FORM

Task Code: 09A1933

Component: 2 PIPE FAN COIL 600 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.1300 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE FILTER	0.100000	FILTER	1	2.0000 2.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.100000	0.030000	0.130000
Material	Cost \$	2.000000		2.000000
Equipment	Hours			0.130000

Components In This Task: 09A1930

TASK DATA FORM

Task Code: 09A1934

Component: 2 PIPE FAN COIL 600 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE FAN COIL UNIT
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 1.4300 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN COIL UNIT	2.200000

Material Resources

Description	Quantity	Unit Cost
F. COIL UNIT	1	710.0000
		710.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.200000	0.660000	2.860000
Material Cost \$	710.000000		710.000000
Equipment Hours			1.430000

Components In This Task: 09A1930

TASK DATA FORM

Task Code: 09A1941

Component: 2 PIPE FAN COIL 1200 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR FAN COIL UNIT
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.5600 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE MOTOR	1.200000

Material Resources

Description	Quantity	Unit Cost
MOTOR	1	50.0000
		50.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	50.000000		50.000000
Equipment Hours			1.560000

Components In This Task: 09A1940

TASK DATA FORM

Task Code: 09A1942

Component: 2 PIPE FAN COIL 1200 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.CLEAN COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	0.000000		0.000000
Equipment hours			0.650000

Components In This Task: 09A1940

TASK DATA FORM

Task Code: 09A1943

Component: 2 PIPE FAN COIL 1200 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.1300 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REPLACE FILTER	0.100000

Material Resources

Description	Quantity	Unit Cost
FILTER	1	2.0000
		2.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.100000	0.030000	0.130000
Material Cost \$	2.000000		2.000000
Equipment Hours			0.130000

Components In This Task: 09A1940

TASK DATA FORM

Task Code: 09A1944

Component: 2 PIPE FAN COIL 1200 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE FAN UNIT
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 1.6250 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE FAN COIL UNIT	2.500000

Material Resources

Description	Quantity	Unit Cost
F. COIL UNIT	1	1170.0000
		1170.0000

Zone	FREQUENCY OF OCCURRENCE		
	high	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.500000	0.750000	3.250000
Material Cost \$	1170.000000		1170.000000
Equipment Hours			1.625000

Components In This Task: 09A1940

TASK DATA FORM

Task Code: 09A1A11

Component: 4 PIPE FAN COIL 200 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR FAN COIL UNIT
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.5600 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE FAN MOTOR	1.200000

Material Resources

Description	Quantity	Unit Cost
MOTOR	1	50.0000
		50.0000

Zone	FREQUENCY OF OCCURRENCE		
	high	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	50.000000		50.000000
Equipment Hours			1.560000

Components In This Task: 09A1A10

TASK DATA FORM

Task Code: 09A1A12Component: 4 PIPE FAN COIL 200 CFM System: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 1 Task Duration: 0.6500 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.CLEAN COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.650000

Components In This Task: 09A1A10

TASK DATA FORM

Task Code: 09A1A13Component: 4 PIPE FAN COIL 200 CFM System: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 1 Task Duration: 0.1300 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE FILTER	0.100000

Material Resources

Description	Quantity	Unit Cost
FILTER	1	2.0000
		2.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.100000	0.030000	0.130000
Material Cost \$	2.000000		2.000000
Equipment Hours			0.130000

Components In This Task: 09A1A10

TASK DATA FORM

Task Code: 09A1A24

Component: 4 PIPE FAN COIL 400 CFM

System: HEAT/COOL GENERATION

Subsystem: EQUIPMENT

Task Description: REPLACE REPLACE FAN COIL UNIT

Unit of Measure: COUNT

Persons per Team: 2

Task Duration: 1.4300 hours

Trade: REFRIG./AIR COND.

Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs
REMOVE/REPLACE FAN COIL UNIT	2.200000

Description	Quantity	Unit Cost
F. COIL UNIT	2	720.0000
		1440.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.200000	0.660000	2.860000
Material Cost \$	1440.000000		1440.000000
Equipment Hours			1.430000

Components In This Task: 09A1A20

TASK DATA FORM

Task Code: 09A1A31

Component: 4 PIPE FAN COIL 600 CFM

System: HEAT/COOL GENERATION

Subsystem: EQUIPMENT

Task Description: M/R REPAIR FAN COIL UNIT

Unit of Measure: COUNT

Persons per Team: 1

Task Duration: 1.5600 hours

Trade: REFRIG./AIR COND.

Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs
REMOVE/REPLACE FAN MOTOR	1.200000

Description	Quantity	Unit Cost
MOTOR	1	50.0000
		50.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	50.000000		50.000000
Equipment Hours			1.560000

Components In This Task: 09A1A30

TASK DATA FORM

Task Code: 09A1A32

Component: 4 PIPE FAN COIL 600 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.3500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.CLEAN COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.650000

Components In This Task: 09A1A30

TASK DATA FORM

Task Code: 09A1A33

Component: 4 PIPE FAN COIL 600 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.1300 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REPLACE FILTER	0.100000

Material Resources

Description	Quantity	Unit Cost
FILTER	1	2.0000
		2.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.100000	0.030000	0.130000
Material Cost \$	2.000000		2.000000
Equipment Hours			0.130000

Components In This Task: 09A1A30

TASK DATA FORM

Task Code: 09A1A34

Component: 4 PIPE FAN COIL 600 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE FAN COIL UNIT
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 1.5600 hours
 Trade: F:FRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN COIL UNIT	2.400000

Material Resources

Description	Quantity	Unit Cost
F. COIL UNIT	1	781.0000
		781.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.400000	0.720000	3.120000
Material Cost \$	781.000000		781.000000
Equipment Hours			1.560000

Components In This Task: 09A1A30

TASK DATA FORM

Task Code: 09A1A41

Component: 4 PIPE FAN COIL 1200 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR FAN COIL UNIT
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.5600 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN MOTOR	1.200000

Material Resources

Description	Quantity	Unit Cost
FAN MOTOR	1	50.0000
		50.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Ave. age	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.600	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	50.000000		50.000000
Equipment Hours			1.560000

Components In This Task: 09A1A40

TASK DATA FORM

Task Code: 09A1A42

Component: 4 PIPE FAN COIL 1200 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.CLEAN COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.650000

Components In This Task: 09A1A40

TASK DATA FORM

Task Code: 09A1A43

Component: 4 PIPE FAN COIL 1200 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.1300 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REPLACE FILTER	0.100000

Material Resources

Description	Quantity	Unit Cost
FILTER	1	2.0000
		2.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.100000	0.030000	0.130000
Material Cost \$	2.000000		2.000000
Equipment Hours			0.130000

Components In This Task: 09A1A40

TASK DATA FORM

Task Code: 09A1A44

Component: 4 PIPE FAN COIL 1200 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE FAN COIL UNIT
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 1.8200 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN COIL UNIT	2.800000

Material Resources

Description	Quantity	Unit Cost
F. COIL UNIT	1	1287.0000
		1287.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.800000	0.840000	3.640000
Material Cost \$	1287.000000		1287.000000
Equipment Hours			1.820000

Components In This Task: 09A1A40

TASK DATA FORM

Task Code: 09A1B11

Component: UNIT VENT 400 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR UNIT VENT
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.0400 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN MOTOR	0.800000

Material Resources

Description	Quantity	Unit Cost
FAN MOTOR	1	50.0000
		50.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.550	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.800000	0.240000	1.040000
Material Cost \$	50.000000		50.000000
Equipment Hours			1.040000

Components In This Task: 09A1B10

TASK DATA FORM

Task Code: 09A1B12Component: UNIT VENT 400 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 1 Task Duration: 1.8200 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	1.000000
2.REPLACE FAN BELT	0.400000

Material Resources

Description	Quantity	Unit Cost
FAN BELT	1	1.5000
		1.5000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.400000	0.420000	1.820000
Material Cost \$	1.500000		1.500000
Equipment Hours			1.820000

Components In This Task: 09A1B10

TASK DATA FORM

Task Code: 09A1B13Component: UNIT VENT 400 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: REPLACE REPLACE UNIT VENTUnit of Measure: COUNTPersons per Team: 2 Task Duration: 1.3000 hoursTrade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE UNIT VENT	2.000000

Material Resources

Description	Quantity	Unit Cost
UNIT VENT	1	1500.0000
		1500.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.000000	0.600000	2.600000
Material Cost \$	1500.000000		1500.000000
Equipment Hours			1.300000

Components In This Task: 09A1B10

TASK DATA FORM

Task Code: 09A1B21

Component: UNIT VENT 1200 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR UNIT VENT
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.0400 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE FAN MOTOR	0.800000	FAN MOTOR	1	50.0000
				50.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.800000	0.240000	1.040000
Material Cost \$	50.000000		50.000000
Equipment Hours			1.040000

Components In This Task: 09A1B20

TASK DATA FORM

Task Code: 09A1B22

Component: UNIT VENT 1200 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.8200 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	1.000000	FAN BELT	1	1.5000
2.REPLACE FAN BELT	0.400000			1.5000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.400000	0.420000	1.820000
Material Cost \$	1.500000		1.500000
Equipment Hours			1.820000

Components In This Task: 09A1B20

TASK DATA FORM

Task Code: 09A1B23

Component: UNIT VENT 1200 CFM

System: HEAT/COOL GENERATION

Subsystem: EQUIPMENT

Task Description: REPLACE REPLACE UNIT VENT

Unit of Measure: COUNT

Persons per Team: 2

Task Duration: 1.6250 hours

Trade: REFRIG./AIR COND.

Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE VENT	2.500000

Material Resources

Description	Quantity	Unit Cost
UNIT VENT	1	1800.0000
		1800.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.500000	0.750000	3.250000
Material Cost \$	1800.000000		1800.000000
Equipment Hours			1.625000

Components In This Task: 09A1B20

TASK DATA FORM

Task Code: 09A1C11

Component: SIN.ZONE DRAW THRU 6500CFM

System: HEAT/COOL GENERATION

Subsystem: EQUIPMENT

Task Description: M/R REPAIR SINGLE ZONE DRAW-THRU

Unit of Measure: COUNT

Persons per Team: 2

Task Duration: 0.7800 hours

Trade: REFRIG./AIR COND.

Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN BEARINGS	1.200000

Material Resources

Description	Quantity	Unit Cost
BEARINGS	2	10.2300
		20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	20.460000		20.460000
Equipment Hours			0.780000

Components In This Task: 09A1C10

TASK DATA FORM

Task Code: 09A1C12

Component: SIN.ZONE DRAW THRU 6500CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	5.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEAT COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	2	10.3400
		20.6800

Zone	FREQUENCY OF OCCURRENCE		Low
	High	Average	
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	5.900000	1.170000	5.070000
Material Cost \$	20.680000		20.680000
Equipment Hours			2.535000

Components In This Task: 09A1C10

TASK DATA FORM

Task Code: 09A1C13

Component: SIN.ZONE DRAW THRU 6500CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.500000

Material Resources

Description	Quantity	Unit Cost
FILTERS	9	1.6400
		14.7600

Zone	FREQUENCY OF OCCURRENCE		Low
	High	Average	
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	14.760000		14.760000
Equipment Hours			0.650000

Components In This Task: 09A1C10

TASK DATA FORM

Task Code: 09A1C14

Component: SIN.ZONE DRAW THRU 6500CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE SINGLE ZONE DRAW-THRU
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 8.1250 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE ZONE UNIT	25.000000	ZONE UNIT	1	4037.0000
				4037.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	25.000000	7.500000	32.500000
Material Cost \$	4037.000000		4037.000000
Equipment Hours			8.125000

Components In This Task: 09A1C10

TASK DATA FORM

Task Code: 09A1C21

Component: SIN.ZONE DRAW THR.10000CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR SINGLE ZONE DRAW-THRU
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE FAN BEARINGS	1.200000	BEARINGS	2	10.2300
				20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	20.460000		20.460000
Equipment Hours			0.780000

Components In This Task: 09A1C20

TASK DATA FORM

Task Code: 09A1C22

Component: SIN.ZONE DRAW THR.10000CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PH PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEAT COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	2	10.3400
		20.6800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	20.680000		20.680000
Equipment Hours			2.535000

Components In This Task: 09A1C20

TASK DATA FORM

Task Code: 09A1C23

Component: SIN.ZONE DRAW THR.10000CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PH PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.500000

Material Resources

Description	Quantity	Unit Cost
FILTERS	12	1.6400
		19.6800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	19.680000		19.680000
Equipment Hours			0.650000

Components In This Task: 09A1C20

TASK DATA FORM

Task Code: 09A1C24

Component: SIN.ZONE DRAW THR.10000CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE SINGLE ZONE DRAW-THRU
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 9.4250 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE T ZONE UNIT	29.000000	ZONE UNIT	1	5832.0000
				5832.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	29.000000	3.700000	37.700000
Material	Cost \$	5832.000000		5832.000000
Equipment	Hours			9.425000

Components In This Task: 09A1C20

TASK DATA FORM

Task Code: 09A1C31

Component: SIN.ZONE DRAW THR.25000CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR SINGLE ZONE DRAW-THRU
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE FAN BEARINGS	1.200000	BEARINGS	2	25.0000
				50.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	1.200000	0.360000	1.560000
Material	Cost \$	50.000000		50.000000
Equipment	Hours			0.780000

Components In This Task: 09A1C30

TASK DATA FORM

Task Code: 09A1C32

Component: SIN.ZONE DRAW THR.25000CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEAT COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	3	21.1800
		63.5400

Zone	FREQUENCY OF OCCURRENCE		Low
	High	Average	
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	63.540000		63.540000
Equipment Hours			2.535000

Components In This Task: 09A1C30

TASK DATA FORM

Task Code: 09A1C33

Component: SIN.ZONE DRAW THR.25000CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.600000

Material Resources

Description	Quantity	Unit Cost
FILTERS	16	1.6400
		26.2400

Zone	FREQUENCY OF OCCURRENCE		Low
	High	Average	
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.600000	0.180000	0.780000
Material Cost \$	26.240000		26.240000
Equipment Hours			0.780000

Components In This Task: 09A1C30

TASK DATA FORM

Task Code: 09A1C34

Component: SIN.ZONE DRAW THR.25000CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE SINGLE ZONE DRAW-THRU
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 17.8750 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE 1 ZONE UNIT	55.000000	ZONE UNIT	1	14410.0000
				14410.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	55.000000	16.500000	71.500000
Material Cost \$	14410.000000		14410.000000
Equipment Hours			17.875000

Components In This Task: 09A1C30

TASK DATA FORM

Task Code: 09A1C41

Component: SIN.ZONE DRAW THR.50000CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: H/R REPAIR SINGLE ZONE DRAW-THRU
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE FAN BEARINGS	1.200000	BEARINGS	2	50.0000
				100.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	100.000000		100.000000
Equipment Hours			0.780000

Components In This Task: 09A1C40

TASK DATA FORM

Task Code: 09A1C42

Component: SIN.ZONE DRAW THR.50000CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEAT COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	3	21.1800
		63.5400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	63.540000		63.540000
Equipment Hours			2.535000

Components In This Task: 09A1C40

TASK DATA FORM

Task Code: 09A1C43

Component: SIN.ZONE DRAW THR.50000CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.9100 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.700000

Material Resources

Description	Quantity	Unit Cost
FILTERS	20	1.6400
		32.8000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.700000	0.210000	0.910000
Material Cost \$	32.800000		32.800000
Equipment Hours			0.910000

Components In This Task: 09A1C40

TASK DATA FORM

Task Code: 09A1C44

Component: SIN.ZONE DRAW THR.50000CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE SINGLE ZONE DRAW-THRU
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 28.2750 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE 1 ZONE UNIT	87.000000	ZONE UNIT	1	21560.0000
				21560.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	172.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	87.000000	26.100000	113.100000
Material Cost \$	2,156.000000		21560.000000
Equipment Hours			28.275000

Components In This Task: 09A1C40

TASK DATA FORM

Task Code: 09A1C51

Component: SIN.ZONE DRAWTHTU 1000CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR SINGLE ZONE DRAW-THRU
 Unit of Measure: COUP
 Persons per Team: 1 Task Duration: 1.5600 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE FAN BEARINGS	1.200000	BEARINGS	2	10.2300
				20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.200	8.400	12.600
3	4.450	8.900	13.350
4	4.750	9.500	14.250
5	4.850	9.700	14.550
6	5.000	10.000	15.000
7	5.450	10.900	16.350
8	5.650	11.300	16.950
9	6.000	12.000	18.000
10	6.400	12.800	19.200
11	8.750	17.500	26.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	20.460000		20.460000
Equipment Hours			1.560000

Components In This Task: 09A1C50

TASK DATA FORM

Task Code: 09A1C52

Component: SIN.ZONE DRAWTHRU 1000CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 5.0700 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEAT COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BELT	1	10.3400

Zone	FREQUENCY OF OCCURRENCE		Low
	High	Average	
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	10.340000		10.340000
Equipment Hours			5.070000

Components In This Task: 09A1C50

TASK DATA FORM

Task Code: 09A1C53

Component: SIN.ZONE DRAWTHRU 1000CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTER	0.500000

Material Resources

Description	Quantity	Unit Cost
FILTER	1	1.6400

Zone	FREQUENCY OF OCCURRENCE		Low
	High	Average	
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	1.640000		1.640000
Equipment Hours			0.650000

Components In This Task: 09A1C50

TASK DATA FORM

Task Code: 09A1C54

Component: SIN.ZONE DRAWTHTU 1000CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE SINGLE ZONE DRAW-THRU
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 3.9000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE ZONE UNIT	6.000000	UNIT	1	1200.0000
				1200.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	42.100	65.150	84.200
2	18.800	28.200	37.600
3	13.200	19.800	26.400
4	12.400	18.600	24.800
5	10.800	16.200	21.600
6	10.000	15.000	20.000
7	8.800	13.200	17.600
8	8.300	12.450	16.600
9	7.700	11.550	15.400
10	7.200	10.800	14.400
11	7.300	10.950	14.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	6.000000	1.800000	7.800000
Material Cost \$	1200.000000		1200.000000
Equipment Hours			3.900000

Components In This Task: 09A1C50

TASK DATA FORM

Task Code: 09A1C61

Component: SIN.ZONE DRAWTHTU 2500CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR SINGLE ZONE DRAW-THRU
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE FAN BEARINGS	1.200000	BEARINGS	2	10.2300
				20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	20.460000		20.460000
Equipment Hours			0.780000

Components In This Task: 09A1C60

TASK DATA FORM

Task Code: 09A1C62

Component: SIN.ZONE DRAWTU 2500CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.5350 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000
3.CLEAN HEAT COIL	0.500000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	2	10.3400
		20.6800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.900000	1.170000	5.070000
Material Cost \$	20.680000		20.680000
Equipment Hours			2.535000

Components In This Task: 09A1C60

TASK DATA FORM

Task Code: 09A1C63

Component: SIN.ZONE DRAWTU 2500CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE DISPOSABLE FILTERS	0.500000

Material Resources

Description	Quantity	Unit Cost
FILTERS	6	1.6400
		9.8400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	0.330	0.330	0.330
2	0.330	0.330	0.330
3	0.330	0.330	0.330
4	0.330	0.330	0.330
5	0.330	0.330	0.330
6	0.330	0.330	0.330
7	0.330	0.330	0.330
8	0.330	0.330	0.330
9	0.330	0.330	0.330
10	0.330	0.330	0.330
11	0.330	0.330	0.330

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	9.840000		9.840000
Equipment Hours			0.650000

Components In This Task: 09A1C60

TASK DATA FORM

Task Code: 09A1C64

Component: SIN.ZONE DRAWTHTU 2500CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE SINGLE ZONE DRAWTHTU
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 5.8500 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE 1 ZONE UNIT	18.000000	UNIT	1	3500.0000
				3500.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	18.000000	5.400000	23.400000
Material Cost \$	3500.000000		3500.000000
Equipment Hours			5.850000

Components In This Task: 09A1C60

TASK DATA FORM

Task Code: 09A1D11

Component: UNIT HEATER 400 CFM System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR UNIT HEATER
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.0400 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE FAN MOTOR	0.800000	FAN MOTOR	1	50.0000
				50.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.800000	0.240000	1.040000
Material Cost \$	50.000000		50.000000
Equipment Hours			1.040000

Components In This Task: 09A1D10

TASK DATA FORM

Task Code: 09A1D12Component: UNIT HEATER 400 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 1 Task Duration: 1.8200 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	1.000000
2.REPLACE FAN BELT	0.400000

Material Resources

Description	Quantity	Unit Cost
FAN BELT	1	1.5000
		1.5000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.400000	0.420000	1.820000
Material Cost \$	1.500000		1.500000
Equipment Hours			1.820000

Components In This Task: 09A1D10

TASK DATA FORM

Task Code: 09A1D13Component: UNIT HEATER 400 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: REPLACE REPLACE UNIT HEATERUnit of Measure: COUNTPersons per Team: 2 Task Duration: 1.3000 hoursTrade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE UNIT HEATER	2.000000

Material Resources

Description	Quantity	Unit Cost
UNIT HEATER	1	295.0000
		295.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.300	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.000000	0.600000	2.600000
Material Cost \$	295.000000		295.000000
Equipment Hours			1.300000

Components In This Task: 09A1D10

TASK DATA FORM

Task Code: 09A1D21Component: UNIT HEATER 1200 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: M/RREPAIR UNIT HEATERUnit of Measure: COUNTPersons per Team: 1Task Duration: 1.0400 hoursTrade: REFRIG./AIR COND.Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE FAN MOTOR	0.800000

Material Resources

Description	Quantity	Unit Cost
FAN MOTOR	1	50.0000
		50.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.800000	0.240000	1.040000
Material Cost \$	50.000000		50.000000
Equipment Hours			1.040000

Components in This Task: 09A1D20

TASK DATA FORM

Task Code: 09A1D22Component: UNIT HEATER 1200 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: PMPREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 1Task Duration: 1.8200 hoursTrade: REFRIG./AIR COND.Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	1.000000
2.REPLACE FAN BELT	0.400000

Material Resources

Description	Quantity	Unit Cost
FAN BELT	1	1.5000
		1.5000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.400000	0.420000	1.820000
Material Cost \$	1.500000		1.500000
Equipment Hours			1.820000

Components in This Task: 09A1D20

TASK DATA FORM

Task Code: 09A1D23Component: UNIT HEATER 1200 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: REPLACE REPLACE UNIT HEATERUnit of Measure: COUNTPersons per Team: 2Task Duration: 1.6250 hoursTrade: REFRIG./AIR COND.Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE HEATER	2.500000

Description	Quantity	Unit Cost
HEATER	1	435.0000
		435.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.500000	0.750000	3.250000
Material Cost \$	435.000000		435.000000
Equipment Hours			1.625000

Components In This Task: 09A1D20

TASK DATA FORM

Task Code: 09A1D31Component: UNIT HEATER 4000 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: M/R REPAIR UNIT HEATERUnit of Measure: COUNTPersons per Team: 1Task Duration: 1.0400 hoursTrade: REFRIG./AIR COND.Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN MOTOR	0.800000

Description	Quantity	Unit Cost
FAN MOTOR	1	120.0000
		120.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.800000	0.240000	1.040000
Material Cost \$	120.000000		120.000000
Equipment Hours			1.040000

Components In This Task: 09A1D30

TASK DATA FORM

Task Code: 09A1D32Component: UNIT HEATER 4000 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 1 Task Duration: 1.8200 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	1.000000
2.REPLACE FAN BELT	0.400000

Material Resources

Description	Quantity	Unit Cost
FAN BELT	1	1.5000
		1.5000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.400000	0.420000	1.820000
Material Cost \$	1.500000		1.500000
Equipment Hours			1.820000

Components In This Task: 09A1D30

TASK DATA FORM

Task Code: 09A1D33Component: UNIT HEATER 4000 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: REPLACE REPLACE UNIT HEATERUnit of Measure: COUNTPersons per Team: 2 Task Duration: 1.6250 hoursTrade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE UNIT HEATER	2.500000

Material Resources

Description	Quantity	Unit Cost
UNIT HEATER	1	782.0000
		782.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.500000	0.750000	3.250000
Material Cost \$	782.000000		782.000000
Equipment Hours			1.625000

Components In This Task: 09A1D30

TASK DATA FORM

Task Code: 09A1D41Component: UNIT HEATER 8000 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: M/RREPAIR UNIT HEATERUnit of Measure: COUNTPersons per Team: 1Task Duration: 1.0400 hoursTrade: REFRIG./AIR COND.Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE FAN MOTOR	0.800000

Material Resources

Description	Quantity	Unit Cost
FAN MOTOR	1	150.0000
		150.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.800000	0.240000	1.040000
Material Cost \$	150.000000		150.000000
Equipment Hours			1.040000

Components In This Task: 09A1D40

TASK DATA FORM

Task Code: 09A1D42Component: UNIT HEATER 8000 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: PMPREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 1Task Duration: 1.8200 hoursTrade: REFRIG./AIR COND.Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	1.000000
2.REPLACE FAN BELT	0.400000

Material Resources

Description	Quantity	Unit Cost
FAN BELT	1	1.5000
		1.5000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.400000	0.420000	1.820000
Material Cost \$	1.500000		1.500000
Equipment Hours			1.820000

Components In This Task: 09A1D40

TASK DATA FORM

Task Code: 09A1D43Component: UNIT HEATER 8000 CFMSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: REPLACE REPLACE UNIT HEATERUnit of Measure: COUNTPersons per Team: 2 Task Duration: 1.6250 hoursTrade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE HEATER	2.500000

Material Resources

Description	Quantity	Unit Cost
HEATER	1	1200.0000
		1200.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	2.500000	0.750000	3.250000
Material	Cost \$	1200.000000		1200.000000
Equipment	Hours			1.625000

Components In This Task: 09A1D40

TASK DATA FORM

Task Code: 09A1D51Component: GASFIRED RADIANT HTR 50MBHSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 1 Task Duration: 1.3000 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.ANNUAL MAINTENANCE	1.000000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	1.000000	0.300000	1.300000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			1.300000

Components In This Task: 09A1D50

TASK DATA FORM

Task Code: 09A1D52

Component: GASFIRED RADIANT HTR SOMBH System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE HEATER
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 1.3000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE HEATER	2.000000	RADIANT HTR	1	420.0000
				420.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.000000	0.600000	2.600000
Material Cost \$	420.000000		420.000000
Equipment Hours			1.300000

Components In This Task: 09A1D50

TASK DATA FORM

Task Code: 09A1E11

Component: HEAT PUMP ST System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR HEAT PUMP
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 23.4000 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.600000	SUP.FAN MTR	1	82.8300
2.REMOVE/REPLACE SUPPLY FAN	0.500000	COND.FAN MTR	1	65.9700
3.REMOVE/REPLACE SUPPLY FAN BRG.	1.200000	REFRIGERANT	1 LB	1.6700
4.REMOVE/REPLACE SUPPLY FAN MTR.	1.800000	HEATER	1	630.0000
5.REMOVE/REPLACE COMPRESSOR	5.800000	HUMIDIFIER	1	2100.0000
6.REMOVE/REPLACE CONDENSER FAN	1.800000	COMPRESSOR	1	1650.0000
7.REMOVE/REPLACE COND.FAN BRG.	1.200000			4530.4700
8.REMOVE/REPLACE COND.FAN MTR.	1.800000			
9.REPLACE REFRIGERANT	0.800000			
10.REMOVE/REPLACE HEATER	0.500000			
11.REMOVE/REPLACE HUMIDIFIER	2.000000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.000	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	18.000000	5.400000	23.400000
Material Cost \$	4530.470000		4530.470000
Equipment Hours			23.400000

Components In This Task: 09A1E10

TASK DATA FORM

Task Code: 09A1E12Component: HEAT PUMP 5TSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 1 Task Duration: 3.6400 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	1.400000
2.RECURRING MAINTENANCE	0.700000
3.SEASONAL SHUTDOWN	0.700000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.800000	0.840000	3.640000
Material Cost \$	0.000000		0.000000
Equipment Hours			3.640000

Components In This Task: 09A1E10

TASK DATA FORM

Task Code: 09A1E13Component: HEAT PUMP 5TSystem: HEAT/COOL GENERATIONSubsystem: EQUIPMENTTask Description: REPLACE REPLACE HEAT PUMPUnit of Measure: COUNTPersons per Team: 2 Task Duration: 4.1925 hoursTrade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE UNIT	6.450000

Material Resources

Description	Quantity	Unit Cost
HEAT PUMP	1	2825.0000
		2825.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	25.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	6.450000	1.935000	8.385000
Material Cost \$	2825.000000		2825.000000
Equipment Hours			4.192500

Components In This Task: 09A1E10

TASK DATA FORM

Task Code: 09A1E21

Component: HEAT PUMP 10T System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR HEAT PUMP
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 23.4000 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR CONTROLS	0.600000
2.REMOVE/REPLACE SUPPLY FAN	0.500000
3.REMOVE/REPLACE SUPPLY FAN BRG.	1.200000
4.REMOVE/REPLACE SUPPLY FAN MTR.	1.800000
5.REMOVE/REPLACE COMPRESSOR	5.800000
6.REMOVE/REPLACE CONDENSER FAN	1.800000
7.REMOVE/REPLACE COND. FAN BRG.	1.200000
8.REMOVE/REPLACE COND. FAN MTR.	1.800000
9.REPLACE REFRIGERANT	0.800000
10.REMOVE/REPLACE HEATER	0.500000
11.REMOVE/REPLACE HUMIDIFIER	2.000000

Material Resources

Description	Quantity	Unit Cost
SUP.FAN MTR.	1	325.0000
COND.FAN MTR	1	110.0000
REFRIGERANT	1 LB	1.6700
HEATER	1	3037.0000
HUMIDIFIER	1	2100.0000
COMPRESSOR	1	3000.0000
		8573.6700

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	18.000000	5.400000	23.400000
Material Cost \$	8573.670000		8573.670000
Equipment Hours			23.400000

Components In This Task: 09A1E20

TASK DATA FORM

Task Code: 09A1E22

Component: HEAT PUMP 10T System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 9.2300 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	5.200000
2.RECURRING MAINTENANCE	1.200000
3.SEASONAL SHUTDOWN	0.700000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	7.100000	2.130000	9.230000
Material Cost \$	0.000000		0.000000
Equipment Hours			9.230000

Components In This Task: 09A1E20

TASK DATA FORM

Task Code: 09A1E23

Component: HEAT PUMP 10T System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE HEAT PUMP
 Unit of Measure: COUNT
 Persons per Team: 3 Task Duration: 4.7667 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE UNIT	11.000000	HEAT PUMP	1	5650.0000
				5650.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	26.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	11.000000	3.300000	14.300000
Material Cost \$	5650.000000		5650.000000
Equipment Hours			4.766667

Components In This Task: 09A1E20

TASK DATA FORM

Task Code: 09A1E31

Component: HEAT PUMP 25T System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: H/R REPAIR HEAT PUMP
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 23.4000 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR CONTROLS	0.600000	SUP.FAN MTR.	1	460.0000
2.REMOVE/REPLACE SUPPLY FAN	0.500000	COND.FAN MTR	1	2200.0000
3.REMOVE/REPLACE SUPPLY FAN BRG.	1.200000	REFRIGERANT	1 LB	1.6700
4.REMOVE/REPLACE SUPPLY FAN MTR.	1.800000	HEATER	1	4725.0000
5.REMOVE/REPLACE COMPRESSOR	5.800000	HUMIDIFIER	1	2100.0000
6.REMOVE/REPLACE CONDENSER FAN	1.800000	COMPRESSOR	1	15000.0000
7.REMOVE/REPLACE COND.FAN BRG.	1.200000			22406.6700
8.REMOVE/REPLACE COND.FAN MTR.	1.800000			
9.REPLACE REFRIGERANT	0.800000			
10.REMOVE/REPLACE HEATER	0.500000			
11.REMOVE/REPLACE HUMIDIFIER	2.000000			

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	18.000000	5.400000	23.400000
Material Cost \$	22406.670000		22406.670000
Equipment Hours			23.400000

Components In This Task: 09A1E30

TASK DATA FORM

Task Code: 09A1E32

Component: HEAT PUMP 25T System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 11.8300 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	7.200000
2.RECURRING MAINTENANCE	1.200000
3.SEASONAL SHUTDOWN	0.700000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	9.100000	2.730000	11.830000
Material Cost \$	0.000000		0.000000
Equipment Hours			11.830000

Components In This Task: 09A1E30

TASK DATA FORM

Task Code: 09A1E33

Component: HEAT PUMP 25T System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE HEAT PUMP
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 4.8750 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE UNIT	15.000000

Material Resources

Description	Quantity	Unit Cost
HEAT PUMP	1	16750.0000
		16750.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	5.200	17.600	28.400
2	9.600	19.200	28.800
3	15.200	30.400	45.600
4	14.800	29.600	44.400
5	19.600	39.200	58.800
6	10.000	20.000	30.000
7	32.100	64.200	96.300
8	46.400	92.800	139.200
9	45.600	91.200	136.800
10	58.500	117.000	175.500
11	192.300	384.600	576.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	15.000000	4.500000	19.500000
Material Cost \$	16750.000000		16750.000000
Equipment Hours			4.875000

Components In This Task: 09A1E30

TASK DATA FORM

Task Code: 09A1E41

Component: HEAT PUMP 1T System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: M/R REPAIR HEAT PUMP THRU-WALL UNIT
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 17.6800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPAIR CONTROLS	0.600000
2.REMOVE/REPLACE SUPPLY FAN	0.500000
3.REMOVE/REPLACE SUPPLY FAN MOTOR	1.800000
4.REMOVE/REPLACE COMPRESSOR	5.800000
5.REMOVE/REPLACE CONDENSOR FAN	1.800000
6.REMOVE/REPLACE COND. FAN MOTOR	1.800000
7.REPLACE REFRIGERANT	0.800000
8.REMOVE/REPLACE HEATER	0.500000

Material Resources

Description	Quantity	Unit Cost
SUP.FAN MTR.	1	53.1200
COND.FAN MTR	1	53.1200
REFRIGERANT	1 LB	1.6700
HEATER	1	14.0000
COMPRESSOR	1	126.1000
		<u>248.0100</u>

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.200	8.400	12.600
3	4.450	8.900	13.350
4	4.750	9.500	14.250
5	4.850	9.700	14.550
6	5.000	10.000	15.000
7	5.450	10.900	16.350
8	5.650	11.300	16.950
9	6.000	12.000	18.000
10	6.400	12.800	19.200
11	8.750	17.500	26.250

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	13.600000	4.080000	17.680000
Material	Cost \$	248.010000		248.010000
Equipment	Hours			17.680000

Components In This Task: 09A1E40

TASK DATA FORM

Task Code: 09A1E42

Component: HEAT PUMP 1T System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 3.6400 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	1.400000
2.RECURRING MAINTENANCE	0.700000
3.SEASONAL SHUTDOWN	0.700000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	2.800000	0.840000	3.640000
Material	Cost \$	0.000000		0.000000
Equipment	Hours			3.640000

Components In This Task: 09A1E40

TASK DATA FORM

Task Code: 09A1E43

Component: HEAT PUMP 1T

System: HEAT/COOL GENERATION

Subsystem: EQUIPMENT

Task Description: REPLACE REPLACE HEAT PUMP THRU-WALL UNIT

Unit of Measure: COUNT

Persons per Team: 2 Task Duration: 2.7690 hours

Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE UNIT	4.260000	HEAT PUMP	1	1200.0000
				1200.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.800	26.400
2	8.400	16.800	25.200
3	8.900	17.800	26.700
4	9.500	19.000	28.500
5	9.700	19.400	29.100
6	10.000	20.000	30.000
7	10.900	21.800	32.700
8	11.300	22.600	33.900
9	12.000	24.000	36.000
10	12.800	25.600	38.400
11	17.500	35.000	52.500

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.260000	1.278000	5.538000
Material Cost \$	1200.000000		1200.000000
Equipment Hours			2.769000

Components In This Task: 09A1E40

TASK DATA FORM

Task Code: 09A1G11

Component: DUCTCOIL 1-ROW H.W.12X24

System: HEAT/COOL GENERATION

Subsystem: EQUIPMENT

Task Description: PM PREVENTIVE MAINTENANCE

Unit of Measure: COUNT

Persons per Team: 2 Task Duration: 1.3000 hours

Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.CLEAN COIL	2.000000			0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.000000	0.600000	2.600000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.300000

Components In This Task: 09A1G10

TASK DATA FORM

Task Code: 09A1G12

Component: DUCTCOIL 1-ROW H.W.12X24 System: HEAT/COOL GENERATION Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE COIL
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 1.1700 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REPLACE COIL	1.800000

Material Resources

Description	Quantity	Unit Cost
COIL	1	76.0000
		76.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	17.800	22.000	26.400
2	16.800	21.000	25.200
3	17.800	22.250	26.700
4	19.000	23.750	28.500
5	19.400	24.250	29.100
6	20.000	25.000	30.000
7	21.800	27.250	32.700
8	22.600	28.250	33.900
9	24.000	30.000	36.000
10	25.600	32.000	38.400
11	35.000	43.750	52.500

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.800000	0.540000	2.340000
Material Cost \$	76.000000		76.000000
Equipment Hours			1.170000

Components In This Task: 09A1G10

TASK DATA FORM

Task Code: 09B2111

Component: FORCE DRAFT FAN 10,000 CFM System: VENTILATION SYSTEM Subsystem: FIXTURES
 Task Description: M/R REPAIR FAN
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE BEARINGS	1.200000

Material Resources

Description	Quantity	Unit Cost
BEARINGS	2	10.2300
		20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	63.150	84.200	105.250
2	28.200	37.600	47.000
3	19.800	26.400	33.000
4	18.600	24.800	31.000
5	16.200	21.600	27.000
6	15.000	20.000	25.000
7	13.200	17.600	22.000
8	12.450	16.600	20.750
9	11.550	15.400	19.250
10	10.800	14.400	18.000
11	10.950	14.600	18.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	20.460000		20.460000
Equipment Hours			0.780000

Components In This Task: 09B2110

TASK DATA FORM

Task Code: 09B2112

Component: FORCE DRAFT FAN 10,000 CFM System: VENTILATION SYSTEM Subsystem: FIXTURES
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 4.4200 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	2	10.3400
		20.6800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.400000	1.020000	4.420000
Material Cost \$	20.680000		20.680000
Equipment Hours			4.420000

Components In This Task: 09B2110

TASK DATA FORM

Task Code: 09B2113

Component: FORCE DRAFT FAN 10,000 CFM System: VENTILATION SYSTEM Subsystem: FIXTURES
 Task Description: REPLACE REPLACE FAN
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 6.5000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE FAN	20.000000

Material Resources

Description	Quantity	Unit Cost
FAN	1	2690.0000
		2690.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	42.100	84.200	126.300
2	18.800	37.600	56.400
3	13.200	26.400	39.600
4	12.400	24.800	37.200
5	10.800	21.600	32.400
6	10.000	20.000	30.000
7	8.800	17.600	26.400
8	8.300	16.600	24.900
9	7.700	15.400	23.100
10	7.200	14.400	21.600
11	7.300	14.600	21.900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	20.000000	6.000000	26.000000
Material Cost \$	2690.000000		2690.000000
Equipment Hours			6.500000

Components In This Task: 09B2110

TASK DATA FORM

Task Code: 0982121

Component: IND DRAFT FAN 10000 CFM

System: VENTILATION SYSTEM

Subsystem: FIXTURES

Task Description: M/R REPAIR FAN

Unit of Measure: COUNT

Persons per Team: 2

Task Duration: 0.7800 hours

Trade: REFRIG./AIR COND.

Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE BEARINGS	1.200000

Description	Quantity	Unit Cost
BEARINGS	2	10.2300
		20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	21.050	42.100	63.150
2	9.400	18.800	28.200
3	6.600	13.200	19.800
4	6.200	12.400	18.600
5	5.400	10.800	16.200
6	5.000	10.000	15.000
7	4.400	8.800	13.200
8	4.150	8.300	12.450
9	3.850	7.700	11.550
10	3.600	7.200	10.800
11	3.650	7.300	10.950

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	20.460000		20.460000
Equipment Hours			0.780000

Components In This Task: 0982120

TASK DATA FORM

Task Code: 0982122

Component: IND DRAFT FAN 10000 CFM

System: VENTILATION SYSTEM

Subsystem: FIXTURES

Task Description: PM PREVENTIVE MAINTENANCE

Unit of Measure: COUNT

Persons per Team: 1

Task Duration: 4.4200 hours

Trade: REFRIG./AIR COND.

Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000

Description	Quantity	Unit Cost
FAN BELTS	2	10.3400
		20.6800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.400000	1.020000	4.420000
Material Cost \$	20.680000		20.680000
Equipment Hours			4.420000

Components In This Task: 0982120

TASK DATA FORM

Task Code: 0982123Component: IND DRAFT FAN 10000 CFMSystem: VENTILATION SYSTEMSubsystem: FIXTURESTask Description: REPLACE REPLACE FANUnit of Measure: COUNTPersons per Team: 4Task Duration: 6.5000 hoursTrade: REFRIG./AIR COND.Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN	20.000000

Material Resources

Description	Quantity	Unit Cost
FAN	1	2764.0000
		2764.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	42.100	84.200	126.300
2	18.800	37.600	56.400
3	13.200	26.400	39.600
4	12.400	24.800	37.200
5	10.800	21.600	32.400
6	10.000	20.000	30.000
7	8.600	17.600	26.400
8	8.300	16.600	24.900
9	7.700	15.400	23.100
10	7.200	14.400	21.600
11	7.300	14.600	21.900

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	20.000000	6.000000	26.000000
Material	Cost \$	2764.000000		2764.000000
Equipment	Hours			6.500000

Components In This Task: 0982120

TASK DATA FORM

Task Code: 09C1111Component: EXHAUST FAN <200 CFMSystem: EXHAUST SYSTEMSubsystem: EQUIPMENTTask Description: M/R REPLACE FAN AND MOTORUnit of Measure: COUNTPersons per Team: 1Task Duration: 0.3900 hoursTrade: REFRIG./AIR COND.Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN AND MOTOR	0.300000

Material Resources

Description	Quantity	Unit Cost
FAN/MOTOR	1	21.2800
		21.2800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	56.550	75.400
2	16.200	24.300	32.400
3	12.000	18.000	24.000
4	11.100	16.650	22.200
5	9.400	14.100	18.800
6	10.000	15.000	20.000
7	7.700	11.550	15.400
8	7.700	11.550	15.400
9	6.800	10.200	13.600
10	6.000	9.000	12.000
11	6.000	9.000	12.000

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	0.300000	0.090000	0.390000
Material	Cost \$	21.280000		21.280000
Equipment	Hours			0.390000

Components In This Task: _____

TASK DATA FORM

Task Code: 09C1112Component: EXHAUST FAN <200 CFMSystem: EXHAUST SYSTEMSubsystem: EQUIPMENTTask Description: PM PREVENTIVE MAINTENANCE CLEANINGUnit of Measure: COUNTPersons per Team: 1 Task Duration: 0.3250 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.CLEAN GRILLE/FAN/MOTOR/HOUSING	0.250000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	3.770	3.770	3.770
2	1.620	1.620	1.620
3	1.200	1.200	1.200
4	1.110	1.110	1.110
5	0.940	0.940	0.940
6	1.000	1.000	1.000
7	0.770	0.770	0.770
8	0.770	0.770	0.770
9	0.680	0.680	0.680
10	0.600	0.600	0.600
11	0.600	0.600	0.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.250000	0.075000	0.325000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.325000

Components In This Task: 09C1110

TASK DATA FORM

Task Code: 09C1113Component: EXHAUST FAN <200 CFMSystem: EXHAUST SYSTEMSubsystem: EQUIPMENTTask Description: REPLACE REPLACE UNITUnit of Measure: COUNTPersons per Team: 1 Task Duration: 3.2500 hoursTrade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE EXHAUST FAN	2.500000

Material Resources

Description	Quantity	Unit Cost
EXH.FAN	1	39.2300
		39.2300

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	75.400	94.250
2	16.200	32.400	40.500
3	12.000	24.000	30.000
4	11.100	22.200	27.750
5	9.400	18.800	23.500
6	10.000	20.000	25.000
7	7.700	15.400	19.250
8	7.700	15.400	19.250
9	6.800	13.600	17.000
10	6.000	12.000	15.000
11	6.000	12.000	15.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.500000	0.750000	3.250000
Material Cost \$	39.230000		39.230000
Equipment Hours			3.250000

Components In This Task: _____

TASK DATA FORM

Task Code: 09C1121

Component: EXHAUST FAN, 1000 CFM System: EXHAUST SYSTEM Subsystem: EQUIPMENT
 Task Description: M/R REPAIR FAN
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.0400 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE BEARINGS	0.800000

Material Resources

Description	Quantity	Unit Cost
BEARINGS	2	10.2300
		20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	5.000	10.000	15.000
2	5.000	10.000	15.000
3	5.000	10.000	15.000
4	5.000	10.000	15.000
5	5.000	10.000	15.000
6	5.000	10.000	15.000
7	5.000	10.000	15.000
8	5.000	10.000	15.000
9	5.000	10.000	15.000
10	5.000	10.000	15.000
11	5.000	10.000	15.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.800000	0.240000	1.040000
Material Cost \$	20.460000		20.460000
Equipment Hours			1.040000

Components In This Task: 09C1120

TASK DATA FORM

Task Code: 09C1122

Component: EXHAUST FAN, 1000 CFM System: EXHAUST SYSTEM Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.3000 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.SERVICE FAN	1.000000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.000000	0.300000	1.300000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.300000

Components In This Task: 09C1120

TASK DATA FORM

Task Code: 09C1123

Component: EXHAUST FAN, 1000 CFM System: EXHAUST SYSTEM Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE ROOF MOUNTED EXHAUST FAN
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.6000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE FAN	4.000000	FAN	1	280.0000
				280.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	15.000	20.000	25.000
2	15.000	20.000	25.000
3	15.000	20.000	25.000
4	15.000	20.000	25.000
5	15.000	20.000	25.000
6	15.000	20.000	25.000
7	15.000	20.000	25.000
8	15.000	20.000	25.000
9	15.000	20.000	25.000
10	15.000	20.000	25.000
11	15.000	20.000	25.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.000000	1.200000	5.200000
Material Cost \$	280.000000		280.000000
Equipment Hours			2.600000

Components In This Task: 09C1120

TASK DATA FORM

Task Code: 09C1131

Component: EXHAUST FAN 10,000 CFM System: EXHAUST SYSTEM Subsystem: EQUIPMENT
 Task Description: M/R REPAIR EXHAUST FAN
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE AND REPLACE BEARINGS	1.200000	BEARINGS	2	10.2300
				20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	37.700	56.550
2	8.100	16.200	24.300
3	6.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	20.460000		20.460000
Equipment Hours			0.780000

Components In This Task: _____

TASK DATA FORM

Task Code: 09C1132

Component: EXHAUST FAN 10,000 CFM System: EXHAUST SYSTEM Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 4.4200 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.ANNUAL MAINTENANCE	3.300000
2.REPLACE FAN BELTS	0.100000

Material Resources

Description	Quantity	Unit Cost
FAN BELTS	2	10.3400
		20.6800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.400000	1.020000	4.420000
Material Cost \$	20.680000		20.680000
Equipment Hours			4.420000

Components In This Task:

TASK DATA FORM

Task Code: 09C1133

Component: EXHAUST FAN 10,000 CFM System: EXHAUST SYSTEM Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE EXHAUST FAN
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 6.5000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE AND REPLACE FAN	20.000000

Material Resources

Description	Quantity	Unit Cost
EXHAUST FAN	1	1703.0000
		1703.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	75.400	113.100
2	16.200	32.400	48.600
3	12.000	24.000	36.000
4	11.100	22.200	33.300
5	9.400	18.800	28.200
6	10.000	20.000	30.000
7	7.700	15.400	23.100
8	7.700	15.400	23.100
9	6.800	13.600	20.400
10	6.000	12.000	18.000
11	6.000	12.000	18.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	20.000000	6.000000	26.000000
Material Cost \$	1703.000000		1703.000000
Equipment Hours			6.500000

Components In This Task:

TASK DATA FORM

Task Code: 09C1141

Component: EXHAUST FAN 25,000 CFM System: EXAUST SYSTEM Subsystem: EQUIPMENT
 Task Description: M/R REPAIR FAN
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE AND REPLACE BEARINGS	1.200000	BEARINGS	2	25.0000
				50.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.850	37.700	56.550
2	8.100	16.200	24.300
3	6.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	50.000000		50.000000
Equipment Hours			0.780000

Components In This Task: _____

TASK DATA FORM

Task Code: 09C1142

Component: EXHAUST FAN 25,000 CFM System: EXAUST SYSTEM Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 2.2100 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	3.300000	FAN BELTS	5	21.1800
2.REPLACE FAN BELTS	0.100000			63.5400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.400000	1.020000	4.420000
Material Cost \$	63.540000		63.540000
Equipment Hours			2.210000

Components In This Task: _____

TASK DATA FORM

Task Code: 09C1143

Component: EXHAUST FAN 25,000 CFM System: EXHAUST SYSTEM Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE EXHAUST FAN
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 6.5000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE AND REPLACE EXHAUST FAN	20.000000	EXHAUST FAN	1 UNIT	3880.0000
				3880.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	75.400	113.100
2	16.200	32.400	48.600
3	12.000	24.000	36.000
4	11.100	22.200	33.300
5	9.400	18.800	28.200
6	10.000	20.000	30.000
7	7.700	15.400	23.100
8	7.700	15.400	23.100
9	6.800	13.600	20.400
10	6.000	12.000	18.000
11	6.000	12.000	18.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	20.000000	6.000000	26.000000
Material Cost \$	3880.000000		3880.000000
Equipment Hours			6.500000

Components In This Task:

TASK DATA FORM

Task Code: 09C1151

Component: EXHAUST FAN 50,000 CFM System: EXHAUST SYSTEM Subsystem: EQUIPMENT
 Task Description: M/R REPAIR EXHAUST FAN
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE AND REPLACE BEARINGS	1.200000	BEARINGS	2	50.0000
				100.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	18.350	37.700	56.550
2	8.100	16.200	24.300
3	6.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	100.000000		100.000000
Equipment Hours			0.780000

Components In This Task:

TASK DATA FORM

Task Code: 09C1152

Component: EXHAUST FAN 50,000 CFM System: EXHAUST SYSTEM Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 4.4200 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ANNUAL MAINTENANCE	3.300000	FAN BELTS	5 BELTS	21.1800
2.REPLACE FAN BELTS	0.100000			63.5400

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources Used	Direct	Indirect	Total
Labor Hours	3.400000	1.020000	4.420000
Material Cost \$	63.540000		63.540000
Equipment Hours			4.420000

Components In This Task: _____

TASK DATA FORM

Task Code: 09C1153

Component: EXHAUST FAN 50,000 CFM System: EXHAUST SYSTEM Subsystem: EQUIPMENT
 Task Description: REPLACE REPLACE EXHAUST FAN
 Unit of Measure: COUNT
 Persons per Team: 4 Task Duration: 8.1250 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE AND REPLACE EXHAUST FAN	25.000000	EXHAUST FAN	1 UNIT	5100.0000
				5100.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	37.700	75.400	113.100
2	16.200	32.400	48.600
3	12.000	24.000	36.000
4	11.100	22.200	33.300
5	9.400	18.800	28.200
6	10.000	20.000	30.000
7	7.700	15.400	23.100
8	7.700	15.400	23.100
9	6.800	13.600	20.400
10	6.000	12.000	18.000
11	6.000	12.000	18.000

SUMMARY

Resources Used	Direct	Indirect	Total
Labor Hours	25.000000	7.500000	32.500000
Material Cost \$	5100.000000		5100.000000
Equipment Hours			8.125000

Components In This Task: _____

TASK DATA FORM

Task Code: 09C1161

Component: EXHAUST FAN, 5000 CFM System: EXHAUST SYSTEM Subsystem: EQUIPMENT
 Task Description: M/R REPAIR FAN
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 0.6500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE/REPLACE BEARINGS	1.000000

Material Resources

Description	Quantity	Unit Cost
BEARINGS	2	10.2300
		20.4600

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.200	8.400	12.600
3	4.450	8.900	13.350
4	4.750	9.500	14.250
5	4.850	9.700	14.550
6	5.000	10.000	15.000
7	5.450	10.900	16.350
8	5.650	11.300	16.950
9	6.000	12.000	18.000
10	6.400	12.800	19.200
11	8.750	17.500	26.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.000000	0.300000	1.300000
Material Cost \$	20.460000		20.460000
Equipment Hours			0.650000

Components In This Task: 09C1160

TASK DATA FORM

Task Code: 09C1162

Component: EXHAUST FAN, 5000 CFM System: EXHAUST SYSTEM Subsystem: EQUIPMENT
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.3000 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.SERVICE FAN	1.000000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.000000	0.300000	1.300000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.300000

Components In This Task: 09C1160

TASK DATA FORM

Task Code: 09C1163

Component: EXHAUST FAN, 500P CFM System: EXHAUST SYSTEM Subsystem: EQUIPMENT
 Task Description: REPLAC. REPLACE ROOF MOUNTED EXHAUST FAN
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 7.8000 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE FAN	12.000000	FAN	1	1540.0000
				1540.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	13.200	17.600	22.000
2	12.600	16.800	21.000
3	13.350	17.800	22.250
4	14.250	19.000	23.750
5	14.550	19.400	24.250
6	15.000	20.000	25.000
7	16.350	21.800	27.250
8	16.950	22.600	28.250
9	18.000	24.000	30.000
10	19.200	25.600	32.000
11	26.250	35.000	43.750

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	12.000000	3.600000	15.600000
Material Cost \$	1540.000000		1540.000000
Equipment Hours			7.800000

Components In This Task: 09C1160

TASK DATA FORM

Task Code: 09C1211

Component: AIR CURTAIN, 1000 CFM System: EXHAUST SYSTEM Subsystem: EQUIPMENT
 Task Description: M/R REPLACE FAN AND MOTOR
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.5600 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REMOVE/REPLACE FAN AND MOTOR	1.200000	FAN/MOTOR	1	88.0000
				88.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	88.000000		88.000000
Equipment Hours			1.560000

Components In This Task: 09C1210

TASK DATA FORM

Task Code: 09C1212

Component: AIR CURTAIN, 1000 CFM

System: EXHAUST SYSTEM

Subsystem: EQUIPMENT

Task Description: PM PREVENTIVE MAINTENANCE CLEANING

Unit of Measure: COUNT

Persons per Team: 1 Task Duration: 0.3250 hours

Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.CLEAN GRILLE/FAN/MOTOR/HOUSING	0.250000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.250000	0.075000	0.325000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.325000

Components In This Task: 09C1210

TASK DATA FORM

Task Code: 09C1213

Component: AIR CURTAIN, 1000 CFM

System: EXHAUST SYSTEM

Subsystem: EQUIPMENT

Task Description: REPLACE REPLACE UNIT

Unit of Measure: COUNT

Persons per Team: 1 Task Duration: 3.2500 hours

Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FAN	2.500000

Material Resources

Description	Quantity	Unit Cost
EXH. FAN	1	650.0000
		650.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	17.600	22.000
2	9.600	19.200	24.000
3	15.200	30.400	38.000
4	14.800	29.600	37.000
5	19.600	39.200	49.000
6	10.000	20.000	25.000
7	32.100	64.200	80.250
8	46.400	92.800	116.000
9	45.600	91.200	114.000
10	58.500	117.000	146.250
11	192.300	384.600	480.750

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.500000	0.750000	3.250000
Material Cost \$	650.000000		650.000000
Equipment Hours			3.250000

Components In This Task: 09C1210

TASK DATA FORM

Task Code: 09C2101Component: METAL FLUE/CHIMNEYSystem: EXHAUST SYSTEMSubsystem: FIXTURESTask Description: REPLACE REPLACE METAL FLUEUnit of Measure: LINEAR FEETPersons per Team: 2 Task Duration: 4.5500 hoursTrade: HEATING SYSTEM Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REPLACE FLUE	7.000000

Material Resources

Description	Quantity	Unit Cost
METAL FLUE	20 LF	5.8500
		117.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	42.100	63.150	84.200
2	18.800	28.200	37.600
3	13.200	19.800	26.400
4	12.400	18.600	24.800
5	10.800	16.200	21.600
6	10.000	15.000	20.000
7	8.800	13.200	17.600
8	8.300	12.450	16.600
9	7.700	11.550	15.400
10	7.200	10.800	14.400
11	7.300	10.950	14.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	7.000000	2.100000	9.100000
Material Cost \$	117.000000		117.000000
Equipment Hours			4.550000

Components In This Task: 09C2100

TASK DATA FORM

Task Code: 09D5101Component: ROOM HUMIDIFIER, FLOOR TYPESystem: SPECIAL SYSTEMSubsystem: HUMIDITY CONTROL SYSTEMTask Description: M/R REPAIR HUMIDIFIERUnit of Measure: COUNTPersons per Team: 1 Task Duration: 0.3900 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.REPLACE ABSORBANT BELT	0.300000

Material Resources

Description	Quantity	Unit Cost
BELT	1	4.5000
		4.5000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	7.540	18.850	30.160
2	3.240	8.100	12.960
3	2.400	6.000	9.600
4	2.220	5.550	8.880
5	1.880	4.700	7.520
6	2.000	5.000	8.000
7	1.540	3.850	6.160
8	1.540	3.850	6.160
9	1.360	3.400	5.440
10	1.200	3.000	4.800
11	1.200	3.000	4.800

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.300000	0.090000	0.390000
Material Cost \$	4.500000		4.500000
Equipment Hours			0.390000

Components In This Task: 09D5100

TASK DATA FORM

Task Code: 0905102

Component: ROOM HUMIDIFIER, FLOOR TYPE System: SPECIAL SYSTEM Subsystem: HUMIDITY CONTROL SYSTEM
 Task Description: PM PREVENTIVE MAINTENANCE CLEANING
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.6500 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.CLEAN BELT/FAN/PAN	0.500000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.650000

Components In This Task: 0905100

TASK DATA FORM

Task Code: 0905103

Component: ROOM HUMIDIFIER, FLOOR TYPE System: SPECIAL SYSTEM Subsystem: HUMIDITY CONTROL SYSTEM
 Task Description: REPLACE REPLACE HUMIDIFIER
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.1300 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE HUMIDIFIER	0.100000

Material Resources

Description	Quantity	Unit Cost
HUMIDIFIER	1	80.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	12.850	37.700	56.550
2	8.100	16.200	24.300
3	6.000	12.000	18.000
4	5.550	11.100	16.650
5	4.700	9.400	14.100
6	5.000	10.000	15.000
7	3.850	7.700	11.550
8	3.850	7.700	11.550
9	3.400	6.800	10.200
10	3.000	6.000	9.000
11	3.000	6.000	9.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.100000	0.030000	0.130000
Material Cost \$	80.000000		80.000000
Equipment Hours			0.130000

Components In This Task: 0905100

TASK DATA FORM

Task Code: 09E1111

Component: THERMOSTATS/PNEUMATICS System: CONTROLS/INSTRUMENT. Subsystem: DEVICES
 Task Description: PM PREVENTIVE MAINTENANCE HEAT/COOL THERMOSTAT
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.3000 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.SERVICE THERMOSTAT	1.000000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.000000	0.300000	1.300000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.300000

Components In This Task: 09E1110

TASK DATA FORM

Task Code: 09E1112

Component: THERMOSTATS/PNEUMATICS System: CONTROLS/INSTRUMENT. Subsystem: DEVICES
 Task Description: REPLACE REPLACE PNEUMATIC THERMOSTAT
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE THERMOSTAT	0.600000

Material Resources

Description	Quantity	Unit Cost
THERMOSTAT	1	176.6300
		176.6300

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	15.000	20.000	25.000
2	15.000	20.000	25.000
3	15.000	20.000	25.000
4	15.000	20.000	25.000
5	15.000	20.000	25.000
6	15.000	20.000	25.000
7	15.000	20.000	25.000
8	15.000	20.000	25.000
9	15.000	20.000	25.000
10	15.000	20.000	25.000
11	15.000	20.000	25.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.600000	0.180000	0.780000
Material Cost \$	176.630000		176.630000
Equipment Hours			0.780000

Components In This Task: 09E1110

TASK DATA FORM

Task Code: 09E1121

Component: HUMIDITY SENSOR System: CONTROLS/INSTRUMENT. Subsystem: DEVICES
 Task Description: PM PREVENTIVE MAINTENANCE HUMIDISTAT
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.3000 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.SERVICE HUMIDISTAT	1.000000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.000000	0.300000	1.300000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.300000

Components In This Task: 09E1120

TASK DATA FORM

Task Code: 09E1122

Component: HUMIDITY SENSOR System: CONTROLS/INSTRUMENT. Subsystem: DEVICES
 Task Description: REPLACE REPLACE HUMIDISTAT
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE HUMIDISTAT	0.800000

Material Resources

Description	Quantity	Unit Cost
HUMIDISTAT	1	94.5900
		94.5900

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.800	9.600	14.400
3	7.600	15.200	22.800
4	7.400	14.800	22.200
5	9.800	19.600	29.400
6	5.000	10.000	15.000
7	16.050	32.100	48.150
8	23.200	46.400	69.600
9	22.800	45.600	68.400
10	29.250	58.500	87.750
11	96.150	192.300	288.450

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.800000	0.180000	0.980000
Material Cost \$	94.590000		94.590000
Equipment Hours			0.780000

Components In This Task: 09E1120

TASK DATA FORM

Task Code: 09E1131Component: FLOW SENSORSystem: CONTROLS/INSTRUMENT.Subsystem: DEVICESTask Description: PM PREVENTIVE MAINTENANCE WATER FLOW SENSORUnit of Measure: COUNTPersons per Team: 1Task Duration: 1.3000 hoursTrade: REFRIG./AIR COND.Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.SERVICE FLOW SENSOR	1.000000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.000000	0.300000	1.300000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.300000

Components In This Task: 09E1130

TASK DATA FORM

Task Code: 09E1132Component: FLOW SENSORSystem: CONTROLS/INSTRUMENT.Subsystem: DEVICESTask Description: REPLACE REPLACE FLOW SENSORUnit of Measure: COUNTPersons per Team: 1Task Duration: 0.7800 hoursTrade: REFRIG./AIR COND.Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE FLOW SENSOR	0.600000

Material Resources

Description	Quantity	Unit Cost
FLOW SENSOR	1	94.3800
		94.3800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	9.600	14.400	19.200
3	15.200	22.800	30.400
4	14.800	22.200	29.600
5	19.600	29.400	39.200
6	10.000	15.000	20.000
7	32.100	48.150	64.200
8	46.400	69.600	92.800
9	45.600	68.400	91.200
10	58.500	87.750	117.000
11	192.300	288.450	384.600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.600000	0.180000	0.780000
Material Cost \$	94.380000		94.380000
Equipment Hours			0.780000

Components In This Task: 09E1130

TASK DATA FORM

Task Code: 09E1141

Component: RADIATION SENSOR System: CONTROLS/INSTRUMENT. Subsystem: DEVICES
 Task Description: PM PREVENTIVE MAINTENANCE RADIATION SENSOR
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.3000 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.SERVICE SENSOR	1.000000			0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.000000	0.300000	1.300000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.300000

Components In This Task: 09E1140

TASK DATA FORM

Task Code: 09E1142

Component: RADIATION SENSOR System: CONTROLS/INSTRUMENT. Subsystem: DEVICES
 Task Description: REPLACE REPLACE RADIATION SENSOR
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REPLACE SENSOR	0.600000	SENSOR	1	72.7500 72.7500

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	13.200	17.600	22.000
2	12.600	16.800	21.000
3	13.350	17.800	22.250
4	14.200	19.000	23.750
5	14.550	19.400	24.250
6	15.000	20.000	25.000
7	16.350	21.800	27.250
8	16.950	22.600	28.250
9	18.000	24.000	30.000
10	19.200	25.600	32.000
11	26.250	35.000	43.750

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.600000	0.180000	0.780000
Material Cost \$	72.750000		72.750000
Equipment Hours			0.780000

Components In This Task: 09E1140

TASK DATA FORM

Task Code: 09E1151

Component: WIND VELOCITY SENSOR System: CONTROLS/INSTRUMENT. Subsystem: DEVICES
 Task Description: PM PREVENTIVE MAINTENANCE WIND VELOCITY SENSOR
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.3000 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.SERVICE SENSOR	1.000000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.000000	0.300000	1.300000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.300000

Components In This Task: 09E1150

TASK DATA FORM

Task Code: 09E1152

Component: WIND VELOCITY SENSOR System: CONTROLS/INSTRUMENT. Subsystem: DEVICES
 Task Description: REPLACE REPLACE WIND VELOCITY SENSOR
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE SENSOR	0.600000

Material Resources

Description	Quantity	Unit Cost
SENSOR	1	42.9500
		42.9500

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	4.400	8.800	13.200
2	4.200	8.400	12.600
3	4.450	8.900	13.350
4	4.750	9.500	14.250
5	4.850	9.700	14.550
6	5.000	10.000	15.000
7	5.450	10.900	16.350
8	5.650	11.300	16.950
9	6.000	12.000	18.000
10	6.400	12.800	19.200
11	8.750	17.500	26.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.600000	0.180000	0.780000
Material Cost \$	42.950000		42.950000
Equipment Hours			0.780000

Components In This Task: 09E1150

TASK DATA FORM

Task Code: 09E1161

Component: PRESSURE SENSOR System: CONTROLS/INSTRUMENT. Subsystem: DEVICES
 Task Description: PM PREVENTIVE MAINTENANCE
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.3000 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.SERVICE SENSOR	1.000000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.000000	0.300000	1.300000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.300000

Components In This Task: 09E1160

TASK DATA FORM

Task Code: 09E1162

Component: PRESSURE SENSOR System: CONTROLS/INSTRUMENT. Subsystem: DEVICES
 Task Description: REPLACE REPLACE PRESSURE SENSOR
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 0.7800 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE SENSOR	0.800000

Material Resources

Description	Quantity	Unit Cost
SENSOR	1	55.0000
		55.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	13.200	17.600	22.000
2	12.600	16.800	21.000
3	13.350	17.800	22.250
4	14.250	19.000	23.750
5	14.550	19.400	24.250
6	15.000	20.000	25.000
7	16.350	21.800	27.250
8	16.950	22.600	28.250
9	18.000	24.000	30.000
10	19.200	25.600	32.000
11	26.250	35.000	43.750

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.800000	0.180000	0.780000
Material Cost \$	55.000000		55.000000
Equipment Hours			0.780000

Components In This Task: 09E1160

TASK DATA FORM

Task Code: 09E1211Component: DAMPER CONTROLLER/ELECT.System: CONTROLS/INSTRUMENT.Subsystem: DEVICESTask Description: PH PREVENTIVE MAINTENANCEUnit of Measure: COUNTPersons per Team: 1 Task Duration: 1.3000 hoursTrade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
T.SERVICE CONTROLLER	1.000000

Material Resources

Description	Quantity	Unit Cost
		0.0000

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.000000	0.300000	1.300000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.300000

Components In This Task: 09E1210

TASK DATA FORM

Task Code: 09E1212Component: DAMPER CONTROLLER/ELECT.System: CONTROLS/INSTRUMENT.Subsystem: DEVICESTask Description: REPLACE REPLACE DAMPER CONTROLLERUnit of Measure: COUNTPersons per Team: 1 Task Duration: 2.6000 hoursTrade: REFRIG./AIR COND. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
T.REMOVE/REPLACE CONTROLLER	2.000000

Material Resources

Description	Quantity	Unit Cost
CONTROLLER	1	270.9500
		270.9500

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	8.800	13.200	17.600
2	8.400	12.600	16.800
3	8.900	13.350	17.800
4	9.500	14.250	19.000
5	9.700	14.550	19.400
6	10.000	15.000	20.000
7	10.900	16.350	21.800
8	11.300	16.950	22.600
9	12.000	18.000	24.000
10	12.800	19.200	25.600
11	17.500	26.250	35.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.000000	0.600000	2.600000
Material Cost \$	270.950000		270.950000
Equipment Hours			2.600000

Components In This Task: 09E1210

TASK DATA FORM

Task Code: 09E1311

Component: SIMPLEX AIR COMPR., 1 HP System: CONTROLS/INSTRUMENT. Subsystem: DEVICES
 Task Description: M/R REPAIR COMPRESSOR
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 6.6365 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
7. REPAIR COMPRESSOR	10.210000

Material Resources

Description	Quantity	Unit Cost
REPAIR KIT	1	12.4500
		12.4500

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	3.080	3.520	3.960
2	2.940	3.360	3.780
3	3.115	3.560	4.005
4	3.325	3.800	4.275
5	3.395	3.880	4.365
6	3.500	4.000	4.500
7	3.815	4.360	4.905
8	3.955	4.520	5.085
9	4.200	4.800	5.400
10	4.480	5.120	5.760
11	6.125	7.000	7.875

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	10.210000	3.063000	13.273000
Material Cost \$	12.450000		12.450000
Equipment Hours			6.636500

Components In This Task: 09E1310

TASK DATA FORM

Task Code: 09E1312

Component: SIMPLEX AIR COMPR., 1 HP System: CONTROLS/INSTRUMENT. Subsystem: DEVICES
 Task Description: PM CHECK AND ADJUST
 Unit of Measure: COUNT
 Persons per Team: 1 Task Duration: 1.4690 hours
 Trade: REFRIG./AIR COND. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1. CHECK COMPRESSOR OIL LEVEL	0.017000
2. CHECK V-BELT TENSION	0.029000
3. REPLACE V-BELT	0.245000
4. DRAIN MOISTURE FROM AIR TANK	0.025000
5. CLEAN AIR INTAKE FILTER ON COMP	0.136000
6. CLEAN REUSABLE OIL FILTER	0.139000
7. CHECK PRESSURE RELIEF VALVE	0.083000
8. CLEAN COOLING FINS	0.081000
9. CHECK MOTOR	0.046000
10. CHECK CONTROL CIRCUITS	0.139000
11. OPERATION CHECKS	0.173000
12. FILL OUT MAINTENANCE REPORT	0.017000

Material Resources

Description	Quantity	Unit Cost
V-BELT	1	1.3800
		1.3800

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	1.000	1.000	1.000
2	1.000	1.000	1.000
3	1.000	1.000	1.000
4	1.000	1.000	1.000
5	1.000	1.000	1.000
6	1.000	1.000	1.000
7	1.000	1.000	1.000
8	1.000	1.000	1.000
9	1.000	1.000	1.000
10	1.000	1.000	1.000
11	1.000	1.000	1.000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.130000	0.339000	1.469000
Material Cost \$	1.380000		1.380000
Equipment Hours			1.469000

Components In This Task: 09E1310

TASK DATA FORM

Task Code: 09E1313

Component: SIMPLEX AIR COMPR., 1 HP System: CONTROLS/INSTRUMENT. Subsystem: DEVICES
 Task Description: REPLACE REPLACE COMPRESSOR
 Unit of Measure: COUNT
 Persons per Team: 2 Task Duration: 1.8395 hours
 Trade: REFRIG./AIR COND. Task Classification: 1

Labor ResourcesMaterial Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE COMPRESSOR, INSTALL NEW	2.830000	COMPRESSOR	1	5758.3300
				5758.3300

Zone	FREQUENCY OF OCCURRENCE		
	High	Average	Low
1	16.720	22.000	27.280
2	15.960	21.000	26.040
3	16.910	22.250	27.590
4	18.050	23.750	29.450
5	18.430	24.250	30.070
6	19.000	25.000	31.000
7	20.710	27.250	33.790
8	21.470	28.250	35.030
9	22.800	30.000	37.200
10	24.320	32.000	39.680
11	33.250	43.750	54.250

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.830000	0.849000	3.679000
Material Cost \$	5758.330000		5758.330000
Equipment Hours			1.839500

Components In This Task: 09E1310

APPENDIX D:
TASK DATA BASE RESOURCE SUMMARY TABLES

Army Wide Task/Basic Task Structure List										Tree id: BF	Group id: B5	Page 33		
UM=Unit of Measure TRD=Trade Index Class=Task Classification THPMTH=Task Work Performance Method														
DESCRIPTION										UM TRD CLASS FREQ	LOW FREQ	MATERIAL COSTS	EQUIPMENT HOURS	THPMTH
1	6	0900000	HEATING, VENTILATION AND AIR CONDITIONING											
2	1	0910000	NATURAL GAS SYSTEMS											
3	1	0911000	EQUIPMENT/METERS/REGULATORS, NAT. GAS											
4	1	0911100	GAS METER											
0911101		REPLACE METER			1	9	0	10.00	16.00	20.00	.3900000	93.000000		
3	2	0912000	PIPING SYSTEMS, NATURAL GAS SYS.											
2	2	0920000	FUEL OIL SYSTEMS											
3	1	0921000	STORAGE SYSTEMS, FUEL OIL SYS.											
3	2	0922000	TRANSFER SYSTEMS, FUEL OIL SYS.											
3	3	0923000	DISTRIBUTION SYSTEMS, FUEL OIL SYS.											
2	3	0930000	LPG SYSTEMS											
3	1	0931000	STORAGE SYSTEMS, LPG SYS.											
3	2	0932000	TRANSFER SYSTEMS, LPG SYS.											
3	3	0933000	DISTRIBUTION SYSTEMS, LPG SYS.											
2	4	0940000	STEAM (SUPPLIED FROM CENTRAL)											
3	1	0941000	PRESSURE REDUCING REG. SYS., STEAM SYS.											
4	1	0941300	STEAM REGULATION VALVE - 2"											
0941301		REPLACE STEAM REGUL. VALVE-2"			1	9	0	1.88	5.64	9.40	7.800000	236.350000	3.900000	
4	2	0941500	COND. METER, 4500#/HR											
0941501		REPAIR METER			1	9	0	5.40	16.20	21.60	1.950000	591.500000	1.950000	
0941502		PREVENTIVE MAINTENANCE CLEANING			1	9	0	2.00	2.00	2.00	1.300000	1.300000	1.300000	
0941503		REPLACE METER			1	9	0	32.40	43.20	43.20	.650000	950.000000	.650000	
3	2	0942000	DISTRIBUTION SYSTEMS, STEAM SYS.											
4	1	0942100	RADIATOR VALVE 1"											

UM=Unit of Measure		TRD=Trade Index	Class=Task Classification	TUPMTH=Task Work Performance Method		EQUIPMENT					
CACES	DESCRIPTION	UM	TRD CLASS	FREQ	AVE FREQ	LABOR HOURS	MATERIAL COSTS	TUPMTH			
0942101	REPLACE RADIATOR VALVE - 1"	1	9	0	28.20	47.00	65.80	1.430000	19.080000	.715000	111111
2	5	0950000	CHILLED WATER (SUPPLIED FROM CENTRAL)								
2	6	0960000	SOLAR SYSTEMS								
3	1	0961000	EQUIPMENT, SOLAR SYSTEMS								
3	2	0962000	PIPING, SOLAR SYSTEMS								
2	7	0970000	OTHER GENERATION SYSTEMS								
2	8	0980000	HEATING GENERATION SYSTEMS								
3	1	0981000	EQUIPMENT, HEATING GENERATION								
4	1	0981100	BOILER (GAS)								
5	1	0981110	250 BTU								
0981111	REPAIR BOILER	1	9	0	4.70	6.58	8.46	6.110000	301.030000	6.110000	1C1111
0981112	PREVENTIVE MAINT. ANNUAL INSP.	1	9	0	1.00	1.00	1.00	1.430000	.000000	1.430000	1C1111
0981113	PREVENTIVE MAINT. EXTER. INSP.	1	9	0	.25	.25	.25	.390000	.000000	.390000	1C1111
0981114	PREVENTIVE MAINT. CLEAN FIREBX	1	9	0	2.00	2.00	2.00	1.430000	.000000	1.430000	1C1111
0981115	PREVENTIVE MAINT. WEEKLY TOUR	1	9	0	.02	.02	.02	.650000	.000000	.650000	1C1111
0981116	REPLACE BOILER	1	9	0	23.50	28.20	32.90	65.000000	2990.000000	65.000000	1C1111
5	2	0981120	2000 BTU								
0981121	REPAIR BOILER	1	9	0	4.70	6.58	8.46	6.110000	581.680000	6.110000	1C1111
0981122	PREVENTIVE MAINT. ANNUAL INSP.	1	9	0	1.00	1.00	1.00	3.250000	.000000	3.250000	1C1111
0981123	PREVENTIVE MAINT. EXTER. INSP.	1	9	0	.25	.25	.25	.390000	.000000	.390000	1C1111
0981124	PREVENTIVE MAINT. CLEAN FIREBX	1	9	0	2.00	2.00	2.00	3.770000	.000000	3.770000	1C1111
0981125	PREVENTIVE MAINT. CLEAN TUBES	1	9	0	5.00	5.00	5.00	10.400000	.000000	10.400000	1C1111
0981126	PREVENTIVE MAINT. WEEKLY TOUR	1	9	0	.02	.02	.02	.650000	.000000	.650000	1C1111
0981127	REPLACE BOILER	1	9	0	23.50	28.20	32.90	184.600000	14182.000000	184.600000	1C1111
5	3	0981130	10000 BTU								
0981131	REPAIR BOILER	1	9	0	4.70	6.58	8.46	6.110000	3436.510000	6.110000	1C1111
0981132	PREVENTIVE MAINT. ANNUAL INSP.	1	9	0	1.00	1.00	1.00	5.590000	.000000	5.590000	1C1111
0981133	PREVENTIVE MAINT. EXTER. INSP.	1	9	0	.25	.25	.25	.390000	.000000	.390000	1C1111
0981134	PREVENTIVE MAINT. CLEAN FIREBX	1	9	0	2.00	2.00	2.00	3.770000	.000000	3.770000	1C1111
0981135	PREVENTIVE MAINT. CLEAN TUBES	1	9	0	5.00	5.00	5.00	4.160000	.000000	4.160000	1C1111
0981136	PREVENTIVE MAINT. WEEKLY TOUR	1	9	0	.02	.02	.02	.650000	.000000	.650000	1C1111
0981137	REPLACE BOILER	1	9	0	23.50	28.20	32.90	248.690000	36000.000000	248.690000	1C1111
4	2	0981200	BOILER (COAL)								
5	1	0981210	40000 BTU								
0981211	REPAIR BOILER	1	9	0	14.10	18.80	28.20	1050.400000	140000.000000	1050.400000	1C1111
0981212	PREVENTIVE MAINT. ANNUAL	1	9	0	1.00	1.00	1.00	68.250000	.000000	68.250000	1C1111
0981213	PREVENTIVE MAINT. EXTER. INSP.	1	9	0	.25	.25	.25	.390000	.000000	.390000	1C1111
0981214	PREVENTIVE MAINT. WEEKLY TOUR	1	9	0	.02	.02	.02	.650000	.000000	.650000	1C1111
0981215	REPLACE BOILER	1	9	0	23.50	28.20	32.90	20800.000000	600000.000000	20800.000000	1C1111
5	2	0981220	100000 BTU								
0981221	REPAIR BOILER	1	9	0	14.10	18.80	28.20	1313.780000	261100.000000	1313.780000	1C1111
0981222	PREVENTIVE MAINT. ANNUAL	1	9	0	1.00	1.00	1.00	89.440000	.000000	89.440000	1C1111
0981223	PREVENTIVE MAINT. EXTER. INSP.	1	9	0	.25	.25	.25	.390000	.000000	.390000	1C1111
0981224	PREVENTIVE MAINT. WEEKLY TOUR	1	9	0	.02	.02	.02	.650000	.000000	.650000	1C1111
0981225	REPLACE BOILER	1	9	0	23.50	28.20	32.90	41600.000000	999999.000000	41600.000000	1C1111
4	3	0981300	BOILER (OIL)								
5	1	0981310	250 BTU								
0981311	REPAIR BOILER	1	9	0	4.70	6.58	8.46	16.640000	209.910000	16.640000	1C1111
0981312	PREVENTIVE MAINT. ANNUAL INSP.	1	9	0	1.00	1.00	1.00	1.950000	.000000	1.950000	1C1111
0981313	PREVENTIVE MAINT. EXTER. INSP.	1	9	0	.25	.25	.25	.390000	.000000	.390000	1C1111
0981314	PREVENTIVE MAINT. WEEKLY TOUR	1	9	0	.02	.02	.02	.650000	.000000	.650000	1C1111
0981315	PREVENTIVE MAINT. CLEAN BURNER	1	9	0	.25	.25	.25	1.170000	.000000	1.170000	1C1111
0981316	REPLACE BOILER	1	9	0	23.50	28.20	32.90	65.000000	2990.000000	65.000000	1C1111

Army Wide Task/Basic Task Structure List

Tree id: BF Group id: B5

Page 35

UM=Unit of Measure		TRD=Trade Index	Class=Task	Classification	TPWMTN=Task	Work	Performance	Method	EQUIPMENT	
CACES	DESCRIPTION	UM	TRD	CLASS	HIGH FREQ	LOW FREQ	HOURS	MATERIAL COSTS	HOURS	TPWMTN
5	0981320 2000 BTU	1	9	0	4.70	6.58	8.46	209.910000	7.280000	IC1111
0981321	REPAIR BOILER	1	9	0	1.00	1.00	7.280000	.000000	5.460000	IC1111
0981322	PREVENTIVE MAINT. ANNUAL INSP.	1	9	0	1.00	1.00	5.460000	.000000	.520000	IC1111
0981323	PREVENTIVE MAINT. EXTER. INSP.	1	9	0	.20	.20	.520000	.000000	.650000	IC1111
0981324	PREVENTIVE MAINT. WEEKLY TOUR	1	9	0	.02	.02	.650000	.000000	1.170000	IC1111
0981325	PREVENTIVE MAINT. CLEAN BURNER	1	9	0	.20	.20	1.170000	.000000	184.600000	IC1111
0981326	REPLACE BOILER	1	9	0	23.50	28.20	32.90	14182.000000	7.280000	IC1111
5	0981330 10000 BTU	1	9	0	4.70	6.58	8.46	234.110000	10.920000	IC1111
0981331	REPAIR BOILER	1	9	0	1.00	1.00	10.920000	.000000	.520000	IC1111
0981332	PREVENTIVE MAINT. ANNUAL INSP.	1	9	0	.25	.25	.520000	.000000	.650000	IC1111
0981333	PREVENTIVE MAINT. EXTER. INSP.	0	9	0	.02	.02	.650000	.000000	1.170000	IC1111
0981334	PREVENTIVE MAINT. WEEKLY TOUR	1	9	0	.20	.20	1.170000	.000000	248.690000	IC1111
0981335	PREVENTIVE MAINT. CLEAN BURNER	1	9	0	23.50	28.20	32.90	36000.000000	8.840000	IC1111
0981336	REPLACE BOILER	1	9	0	4.70	6.58	8.46	360.390000	7.410000	IC1111
5	0981400 BOILER DUAL FIRED	1	9	0	4.70	6.58	8.46	.000000	.520000	IC1111
0981401	REPAIR BOILER	1	9	0	1.00	1.00	7.410000	.000000	.520000	IC1111
0981402	PREVENTIVE MAINT. ANNUAL INSP.	1	9	0	.25	.25	.520000	.000000	.650000	IC1111
0981403	PREVENTIVE MAINT. EXTER. INSP.	1	9	0	.02	.02	.650000	.000000	184.600000	IC1111
0981404	PREVENTIVE MAINT. WEEKLY TOUR	1	9	0	23.50	28.20	32.90	17632.000000	9.230000	IC1111
0981405	REPLACE BOILER	1	9	0	4.70	6.58	8.46	6493.030000	9.360000	IC1111
5	0981420 20000 BTU	1	9	0	4.70	6.58	8.46	.000000	.520000	IC1111
0981421	REPAIR BOILER	1	9	0	1.00	1.00	7.410000	.000000	.520000	IC1111
0981422	PREVENTIVE MAINT. ANNUAL INSP.	1	9	0	.25	.25	.520000	.000000	.650000	IC1111
0981423	PREVENTIVE MAINT. EXTER. INSP.	1	9	0	.02	.02	.650000	.000000	184.600000	IC1111
0981424	PREVENTIVE MAINT. WEEKLY TOUR	1	9	0	23.50	28.20	32.90	67000.000000	651.300000	IC1111
0981425	REPLACE BOILER	1	9	0	4.70	6.58	8.46	1485.000000	18.850000	IC1111
5	0981500 BOILER PNEUMATIC COAL SPREADER	1	9	0	4.70	9.40	14.10	.000000	.390000	IC1111
0981501	REPAIR SPREADER	1	9	0	.00	.00	.390000	.000000	.910000	IC1111
0981502	PREVENTIVE MAINT. DAILY TOUR	1	9	0	.02	.02	.910000	.000000	1.690000	IC1111
0981503	PREVENTIVE MAINT. WEEKLY	1	9	0	.08	.08	1.690000	.000000	4.550000	IC1111
0981504	PREVENTIVE MAINT. MONTHLY	1	9	0	1.00	1.00	4.550000	.000000	9.620000	IC1111
0981505	PREVENTIVE MAINT. ANNUAL	1	9	0	14.10	18.80	23.50	200000.000000	10400.000000	IC1111
5	0981600 ASH HANDLING SYSTEM	1	9	0	4.70	9.40	14.10	.000000	.910000	IC1111
0981601	REPAIR SYSTEM	1	9	0	.00	.00	.910000	.000000	1.430000	IC1111
0981602	PREVENTIVE MAINT. DAILY	1	9	0	.08	.08	1.430000	.000000	2.340000	IC1111
0981603	PREVENTIVE MAINT. MONTHLY	1	9	0	1.00	1.00	2.340000	.000000	4.589000	IC1111
0981604	PREVENTIVE MAINT. ANNUAL	1	9	0	14.10	18.80	23.50	285.000000	2.600000	IC1111
0981605	REPLACE ASH HANDLING SYSTEM	1	9	0	4.70	9.40	14.10	5.000000	4.589000	IC1111
5	0981700 FUEL OIL EQUIPMENT	1	9	0	4.70	9.40	14.10	.000000	.520000	IC1111
0981701	REPAIR FUEL OIL EQUIPMENT	1	9	0	1.00	1.00	7.410000	.000000	.520000	IC1111
0981702	PREVENTIVE MAINT. MONTHLY	1	9	0	.02	.02	.520000	.000000	.650000	IC1111
0981703	PREVENTIVE MAINT. WEEKLY	1	9	0	.08	.08	.650000	.000000	1.170000	IC1111
0981704	PREVENTIVE MAINT. ANNUAL	1	9	0	1.00	1.00	1.170000	.000000	184.600000	IC1111
5	0981800 CHEMICAL FEED SYSTEM	1	9	0	4.70	9.40	14.10	.000000	.910000	IC1111
0981801	REPAIR CHEMICAL FEED	1	9	0	1.00	1.00	7.410000	.000000	.520000	IC1111
0981802	PREVENTIVE MAINT. MONTHLY	1	9	0	.02	.02	.520000	.000000	.650000	IC1111
0981803	PREVENTIVE MAINT. WEEKLY	1	9	0	.08	.08	.650000	.000000	1.170000	IC1111
0981804	PREVENTIVE MAINT. ANNUAL	1	9	0	1.00	1.00	1.170000	.000000	184.600000	IC1111
5	0981900 FEED WATER SUPPLY	1	9	0	4.70	9.40	14.10	.000000	.910000	IC1111
0981901	REPAIR FEED WATER SUPPLY	1	9	0	1.00	1.00	7.410000	.000000	.520000	IC1111
0981902	PREVENTIVE MAINT. MONTHLY	1	9	0	.02	.02	.520000	.000000	.650000	IC1111
0981903	PREVENTIVE MAINT. WEEKLY	1	9	0	.08	.08	.650000	.000000	1.170000	IC1111
0981904	PREVENTIVE MAINT. ANNUAL	1	9	0	1.00	1.00	1.170000	.000000	184.600000	IC1111

Army Wide Task/Basic Task Structure List

Tree id: BF Group id: B5

Page 36

UM=Unit of Measure		TRD=Trade Index	Class=Task Classification			TUPMTH=Task Worl: Performance Method				
CACES	DESCRIPTION	UM	TRD	CLASS	HIGH AVE FREQ	LOW FREQ	LABOR HOURS	MATERIAL COSTS	EQUIPMENT HOURS	TUPMTH
0981911	REPAIR FEED WATER SUPPLY PUMP	1	9	0	9.40	14.10	18.80	2.171000	3750.000000	2.171000 IC1111
0981912	PREVENTIVE MAINTENANCE	1	9	0	1.00	1.00	1.00	19.500000	.000000	19.500000 IC1111
0981913	REPLACE FEEDWATER PUMP	1	9	0	9.40	14.10	18.80	28.600000	2600.000000	28.600000 IC1111
4 10	0981A00 DEAEATOR									
5 1	0981A10 DEAEATOR									
0981A11	REPAIR DEAEATOR	1	9	0	4.70	9.40	14.10	.650000	.000000	.650000 IC1111
0981A12	PREVENTIVE MAINTENANCE	1	9	0	1.00	1.00	1.00	19.500000	.000000	19.500000 IC1111
0981A13	REPLACE DEAEATOR	1	9	0	9.40	18.80	28.20	260.000000	20000.000000	260.000000 IC1111
4 11	0981B00 BLOWOFF SYSTEM									
5 1	0981B10 BLOWOFF SYSTEM									
0981B11	REPAIR BOILER BLOWOFF SYSTEM	1	9	0	9.40	18.80	28.20	1.300000	4.156000	1.300000 IC1111
0981B12	REPLACE BOILER BLOWOFF SYSTEM	1	9	0	9.40	14.10	18.80	2.600000	139.000000	2.600000 IC1111
4 12	0981C00 HOUSE FURNACE (GAS)									
5 1	0981C10 25 KBTU									
0981C11	REPAIR FURNACE	1	9	0	4.70	9.40	14.10	3.328000	295.000000	3.328000 IC1111
0981C12	PREVENTIVE MAINTENANCE	1	9	0	1.00	1.00	1.00	4.030000	.000000	4.030000 IC1111
0981C13	REPLACE FURNACE	1	9	0	9.40	14.10	18.80	10.400000	335.000000	10.400000 IC1111
5 2	0981C20 100 KBTU									
0981C21	REPAIR FURNACE	1	9	0	4.70	9.40	14.10	3.360000	353.000000	3.360000 IC1111
0981C22	PREVENTIVE MAINTENANCE	1	9	0	1.00	1.00	1.00	4.030000	.000000	4.030000 IC1111
0981C23	REPLACE FURNACE	1	9	0	9.40	14.10	18.80	20.800000	445.000000	20.800000 IC1111
5 3	0981C30 200 KBTU									
0981C31	REPAIR FURNACE	1	9	0	4.70	9.40	14.10	3.360000	430.000000	3.360000 IC1111
0981C32	PREVENTIVE MAINTENANCE	1	9	0	1.00	1.00	1.00	4.030000	.000000	4.030000 IC1111
0981C33	REPLACE FURNACE	1	9	0	9.40	14.10	18.80	20.800000	1685.000000	20.800000 IC1111
4 13	0981D00 HOUSE FURNACE (OIL)									
5 1	0981D10 25 KBTU									
0981D11	REPAIR FURNACE	1	9	0	4.70	9.40	14.10	3.360000	419.000000	3.360000 IC1111
0981D12	PREVENTIVE MAINTENANCE	1	9	0	1.00	1.00	1.00	5.330000	.000000	5.330000 IC1111
0981D13	REPLACE FURNACE	1	9	0	9.40	14.10	18.80	10.400000	800.000000	10.400000 IC1111
5 2	0981D20 100 KBTU									
0981D21	REPAIR FURNACE	1	9	0	4.70	9.40	14.10	3.360000	457.000000	3.360000 IC1111
0981D22	PREVENTIVE MAINTENANCE	1	9	0	1.00	1.00	1.00	5.330000	.000000	5.330000 IC1111
0981D23	REPLACE FURNACE	1	9	0	9.40	14.10	18.80	20.800000	1281.600000	20.800000 IC1111
5 3	0981D30 200 KBTU									
0981D31	REPAIR FURNACE	1	9	0	4.70	9.40	18.80	3.360000	535.000000	3.360000 IC1111
0981D32	PREVENTIVE MAINTENANCE	1	9	0	1.00	1.00	1.00	5.330000	.000000	5.330000 IC1111
0981D33	REPLACE FURNACE	1	9	0	9.40	14.10	18.80	20.800000	1505.000000	20.800000 IC1111
4 14	0981E00 HOUSE FURNACE (ELECTRIC)									
5 1	0981E10 25 KBTU									
0981E11	REPAIR FURNACE	1	9	0	4.70	9.40	14.10	4.290000	200.000000	4.290000 IC1111
0981E12	PREVENTIVE MAINTENANCE	1	9	0	1.00	1.00	1.00	1.950000	.000000	1.950000 IC1111
0981E13	REPLACE FURNACE	1	9	0	9.40	14.10	18.80	10.400000	567.000000	10.400000 IC1111
5 2	0981E20 100 KBTU									
0981E21	REPAIR FURNACE	1	9	0	4.70	9.40	14.10	4.290000	288.000000	4.290000 IC1111
0981E22	PREVENTIVE MAINTENANCE	1	9	0	1.00	1.00	1.00	1.950000	.000000	1.950000 IC1111
0981E23	REPLACE FURNACE	1	9	0	9.40	14.10	18.80	20.800000	708.750000	20.800000 IC1111
5 3	0981E30 200 KBTU									
0981E31	REPAIR FURNACE	1	9	0	4.70	9.40	14.10	4.290000	370.000000	4.290000 IC1111
0981E32	PREVENTIVE MAINTENANCE	1	9	0	1.00	1.00	1.00	1.950000	.000000	1.950000 IC1111
0981E33	REPLACE FURNACE	1	9	0	9.40	14.10	18.80	20.800000	900.000000	20.800000 IC1111
4 15	0981F00 RADIATOR, CAST IRON 10' SEC.									
0981F01	REPLACE RADIATOR, CAST IRON	1	9	0	28.20	47.00	65.80	5.200000	166.000000	5.200000 I11111

Army Wide Task/Basic Task Structure List

Tree id: BF Group id: B5

Page 37

UM=Unit of Measure		TRD=Trade Index	Class=Task	Classification	Task	Work	Performance	Method		
CACES	DESCRIPTION	UM	TRD	CLASS	FREQ	LOW FREQ	HOURS	MATERIAL COSTS	EQUIPMENT HOURS	TWPMTH
4 16	0981G00 RADIATOR, BASEBOARD 10' SEC.	1	9	0	9.40	18.80	28.20	219.000000	2.600000	111111
0981G01	REPLACE RADIATOR, BASEBOARD	1	9	0	9.40	18.80	28.20	219.000000	2.600000	111111
4 17	0981H00 RADIATOR, FINNED WALL 10' SEC.	1	9	0	9.40	18.80	28.20	247.500000	2.600000	111111
0981H01	REPLACE WALL RADIATOR, FINNED	1	9	0	9.40	18.80	28.20	247.500000	2.600000	111111
4 18	0981I00 EXPANSION TANK	1	9	0	1.88	4.70	9.40	.039000	.039000	111111
0981I01	REFILL EXPANSION TANK	1	9	0	1.88	4.70	9.40	.039000	.039000	111111
0981I02	REPLACE EXPANSION TANK	1	9	0	18.80	47.00	65.80	128.000000	3.471000	111111
4 19	0981J00 STEAM CONVERTOR, <300,000	1	9	0	2.82	4.70	9.40	5.560000	5.941000	111111
0981J01	REPAIR STEAM CONVERTOR	1	9	0	2.82	4.70	9.40	5.560000	5.941000	111111
0981J11	INSPECT FOR LEAKS	1	9	0	2.00	2.00	2.00	.000000	.092300	111111
0981J12	REPLACE STEAM CONVERTOR	1	9	0	2.00	2.00	2.00	.000000	.092300	111111
0981J13	REPLACE STEAM CONVERTOR	1	9	0	28.20	37.60	7.358000	785.000000	7.358000	111111
4 20	0981K00 FLASH TANK	1	9	0	9.40	18.80	28.20	5.560000	5.941000	111111
0981K10	FLASH TANK	1	9	0	9.40	18.80	28.20	5.560000	5.941000	111111
0981K11	REPAIR FLASH TANK	1	9	0	2.82	4.70	9.40	5.560000	5.941000	111111
0981K12	PREVENTIVE MAINTENANCE ON FLAS	1	9	0	1.00	1.00	1.00	.039000	.039000	111111
0981K13	REPLACE FLASH TANK	1	9	0	4.70	14.10	18.80	139.000000	6.500000	111111
3 2	0982000 FIXTURES, HEATING GENERATION	1	9	0	2.82	4.70	9.40	5.560000	5.941000	111111
3 3	0983000 INTERCONNECTING PIPING SYSTEM, HEAT GEN.	1	9	0	1.00	1.00	1.00	.039000	.039000	111111
3 4	0984000 DISTRIBUTION PIPING SYSTEM, HEAT GEN.	1	9	0	4.70	14.10	18.80	139.000000	6.500000	111111
4 1	0984100 PIPE/FITTINGS	1	9	0	9.40	18.80	28.20	16.0000	.325000	111111
5 1	0984110 PIPE/FITTINGS, ST.&CP	4	9	0	9.40	14.10	18.80	.160000	.325000	111111
0984111	REPAIR HOT WATER PIPE	4	9	0	9.40	14.10	18.80	.160000	.325000	111111
0984112	REPLACE HOT WATER PIPE, 12" SE	4	9	0	28.20	47.00	65.80	39.000000	10.744500	111111
5 2	0984120 PIPE/FITTINGS, COPPER	4	9	0	9.40	14.10	18.80	.080000	.184600	111111
0984121	REPAIR SOLDER JOINT	4	9	0	9.40	14.10	18.80	.080000	.184600	111111
0984122	REPLACE HOT WATER PIPE, 12" SE	4	9	0	18.80	28.20	47.00	48.120000	5.551000	111111
4 2	0984200 GATE VALVE	1	9	0	9.40	18.80	28.20	.420000	1.511900	111111
5 1	0984210 GATE VALVE, 3/8"-1 1/2"	1	9	0	9.40	18.80	28.20	.260000	.260000	111111
0984211	REPACK GATE VALVE GLAND	1	9	0	9.40	18.80	28.20	.260000	.260000	111111
0984212	REPLACE GATE VALVE	1	9	0	9.40	18.80	28.20	.260000	.260000	111111
5 2	0984220 GATE VALVE, 2"-3"	1	9	0	9.40	18.80	28.20	.840000	.354900	111111
0984221	REPACK GATE VALVE GLAND	1	9	0	9.40	18.80	28.20	.840000	.354900	111111
0984222	REPLACE GATE VALVE	1	9	0	9.40	18.80	28.20	.840000	.354900	111111
5 3	0984280 DRAIN VALVE	1	9	0	1.88	2.82	4.70	.315000	.354900	111111
0984281	REPACK DRAIN VALVE GLAND	1	9	0	1.88	2.82	4.70	.315000	.354900	111111
0984282	REPLACE VALVE STEM ASSEMBLY	1	9	0	4.70	7.52	9.40	5.500000	.055900	111111
0984283	REPLACE DRAIN VALVE	1	9	0	14.10	18.80	23.50	16.900000	.689000	111111
4 3	0984300 PIPE INSULATION	1	9	0	9.40	18.80	28.20	.572000	.572000	111111
5 1	0984370 STEAM TRAP, F&T<1"	1	9	0	9.40	18.80	28.20	.555100	.555100	111111
0984371	REPAIR STEAM TRAP	1	9	0	9.40	18.80	28.20	.555100	.555100	111111
0984372	PREVENTIVE MAINTENANCE ON STEA	1	9	0	1.00	1.00	1.00	.650000	.650000	111111
0984373	REPLACE STEAM TRAP	1	9	0	4.70	9.40	14.10	71.420000	1.300000	111111
5 2	0984380 AIR SEPARATOR	4	9	0	2.82	4.70	9.40	1.960000	.338000	111111
0984381	REPAIR BROKEN INSULATION	4	9	0	2.82	4.70	9.40	1.960000	.338000	111111
0984382	REPLACE INSULATION	4	9	0	9.40	28.20	47.00	900.000000	91.000000	111111
4 4	0984400 CIRCULATOR PUMP	1	9	0	9.40	18.80	28.20	1.400000	.603200	111111
5 1	0984410 CIRCULATOR PUMP, <1HP	1	9	0	1.88	4.70	9.40	1.400000	.603200	111111
0984411	REPAIR CIRCULATION PUMP	1	9	0	1.88	4.70	9.40	1.400000	.603200	111111
0984412	PREVENTIVE MAINTENANCE ON CIRC	1	9	0	1.00	1.00	1.00	.260000	.109200	111111
0984413	REPLACE CIRCULATOR PUMP	1	9	0	9.40	14.10	18.80	350.000000	4.199000	111111
5 2	0984420 CIRCULATION PUMP 5 HP	1	9	0	1.88	4.70	9.40	32.820000	.603200	111111
0984421	REPAIR CIRCULATION PUMP - 5HP	1	9	0	1.88	4.70	9.40	32.820000	.603200	111111

UM=Unit of Measure		TRD=Trade Index	Class=Task Classification		TUPMT=Task Work Performance Method		EQUIPMENT			
CAGES	DESCRIPTION	UM	TRD	CLASS	FREQ	LOW FREQ	HOURS	MATERIAL COSTS	HOURS	TUPMTH
0984422	PREVENTIVE MAINTENANCE-PUMP	1	9	0	1.00	1.00	.109200	.260000	.109200	111111
0984423	REPLACE CIRCULATION PUMP 5 HP	1	9	0	9.40	14.10	4.199000	1200.000000	2.099500	111111
5	0984460 COND. RCVR., 10-15 GAL.									
0984461	REPAIR CONDENSATE RECEIVER	1	9	0	.94	2.82	2.047500	27.000000	2.047500	111111
0984462	REPAIR CONDENSATE RECEIVER, MOT	1	9	0	1.88	4.70	.648700	8.020000	.648700	111111
0984463	PREVENTIVE MAINTENANCE ON COND	1	9	0	1.00	1.00	1.300000	.000000	1.300000	111111
0984464	REPLACE CONDENSATE RECEIVER	1	9	0	9.40	18.80	15.600000	1800.000000	15.600000	111111
3	0985000 HVAC VALVES, HEATING GENERATION									
2	0990000 COOLING GENERATION SYSTEMS									
3	0991000 EQUIPMENT, COOLING GENERATION									
4	0991100 A/C DX PACKAGED									
5	0991110 5 TONS									
0991111	REPAIR AIR CONDITIONER	1	6	0	9.80	19.60	20.800000	2445.500000	20.800000	111111
0991112	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	3.640000	.000000	3.640000	111111
0991113	REPLACE AIR CONDITIONER	1	6	0	19.60	39.20	8.385000	1750.000000	8.385000	111111
5	0991120 20 TONS									
0991121	REPAIR AIR CONDITIONER	1	6	0	9.80	19.60	20.800000	8508.050000	20.800000	111111
0991122	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	9.230000	.000000	9.230000	111111
0991123	REPLACE AIR CONDITIONER	1	6	0	19.60	39.20	20.410000	7500.000000	20.410000	111111
5	0991130 50 TONS									
0991131	REPAIR AIR CONDITIONER	1	6	0	9.80	19.60	23.400000	25712.410000	23.400000	111111
0991132	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	11.830000	.000000	11.830000	111111
0991133	REPLACE AIR CONDITIONER	1	6	0	19.60	39.20	47.710000	20000.000000	47.710000	111111
4	0991200 A/C WINDOW									
5	0991210 1 TON									
0991211	REPAIR AIR CONDITIONER	1	6	0	7.84	15.68	1.300000	1.670000	1.300000	111111
0991212	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.690000	.000000	1.690000	111111
0991213	REPLACE AIR CONDITIONER	1	6	0	9.80	19.60	5.980000	500.000000	5.980000	111111
5	0991220 2 TONS									
0991221	REPAIR AIR CONDITIONER	1	6	0	7.84	15.68	1.300000	1.670000	1.300000	111111
0991222	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.690000	.000000	1.690000	111111
0991223	REPLACE AIR CONDITIONER	1	6	0	9.80	19.60	6.500000	700.000000	6.500000	111111
4	0991300 A/C PAD MOUNTED									
5	0991310 AIR CONDITIONER PAD MOUNT. 5 TON									
0991311	REPAIR AIR CONDITIONER	1	6	0	7.84	15.68	1.300000	8.350000	1.300000	111111
0991312	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	4.940000	.000000	4.940000	111111
0991313	REPLACE AIR CONDITIONER	1	6	0	9.80	19.60	6.500000	1400.000000	6.500000	111111
5	0991320 AIR CONDITIONER PAD MOUNT. 20 TON									
0991321	REPAIR AIR COND. PAD MNT. 20 T	1	6	0	9.80	19.60	20.800000	8508.050000	20.800000	111111
0991322	PREVENTIVE MAINTENANCE A/C 20T	1	6	0	1.00	1.00	9.230000	.000000	9.230000	111111
0991323	REPLACE AIR CONDNER. PAD 20 TON	1	6	0	9.40	18.80	20.410000	7500.000000	20.410000	111111
4	0991400 CHILLERS ACH RECIP									
5	0991410 20 TONS									
0991411	REPAIR HERMETIC CHILLER	1	6	0	9.80	19.60	19.890000	4830.000000	19.890000	111111
0991412	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	22.490000	.000000	22.490000	111111
0991413	REPLACE CHILLER	1	6	0	19.60	39.20	28.600000	10150.000000	28.600000	111111
5	0991420 50 TONS									
0991421	REPAIR HERMETIC CHILLER	1	6	0	9.80	19.60	24.570000	10750.000000	24.570000	111111
0991422	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	27.950000	.000000	27.950000	111111
0991423	REPLACE CHILLER	1	6	0	19.60	39.20	40.300000	18000.000000	40.300000	111111
5	0991430 100 TONS									
0991431	REPAIR HERMETIC CHILLER	1	6	0	9.80	19.60	24.570000	27650.000000	24.570000	111111
0991432	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	27.950000	.000000	27.950000	111111

Army Wide Task/Basic Task Structure List

Tree id: BF Group id: B5

Page 39

UM=Unit of Measure		TRD=Trade Index	Class=Task Classification	High FREQ	Ave FREQ	Low FREQ	Work Hours	Performance	Method	EQUIPMENT HOURS	TPMTH
CACES	DESCRIPTION	UM	TRD	CLASS	FREQ	FREQ	HOURS	COSTS	MATERIAL		
0991433	REPLACE CHILLER	1	6	0	19.60	39.20	58.80	72.800000	38000.000000	72.800000	ICIIII
4	0991500 CHILLERS WCH RECIP.										
5	0991510 20 TONS										
0991511	REPAIR HERMETIC CHILLER	1	6	0	9.80	19.60	29.40	12.870000	4693.000000	12.870000	ICIIII
0991512	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	22.750000	.000000	22.750000	ICIIII
0991513	REPLACE CHILLER	1	6	0	19.60	39.20	58.80	29.900000	9000.000000	29.900000	ICIIII
5	0991520 50 TONS										
0991521	REPAIR HERMETIC CHILLER	1	6	0	9.80	19.60	29.40	22.750000	10970.000000	22.750000	ICIIII
0991522	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	22.750000	.000000	22.750000	ICIIII
0991523	REPLACE CHILLER	1	6	0	19.60	39.20	58.80	48.100000	15000.000000	48.100000	ICIIII
5	0991530 100 TONS										
0991531	REPAIR HERMETIC CHILLER	1	6	0	9.80	19.60	29.40	22.750000	27900.000000	22.750000	ICIIII
0991532	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	22.750000	.000000	22.750000	ICIIII
0991533	REPLACE CHILLER	1	6	0	19.60	39.20	58.80	74.100000	25500.000000	74.100000	ICIIII
4	0991600 CHILLERS HERMETIC CENT.										
5	0991610 100 TONS										
0991611	REPAIR CHILLER	1	6	0	9.80	19.60	29.40	16.770000	21067.000000	16.770000	ICIIII
0991612	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	33.150000	.000000	33.150000	ICIIII
0991613	REPLACE CHILLER	1	6	0	19.60	39.20	58.80	62.400000	35650.000000	62.400000	ICIIII
5	0991620 300 TONS										
0991621	REPAIR CHILLER	1	6	0	9.80	19.60	29.40	16.250000	62801.000000	16.250000	ICIIII
0991622	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	33.150000	.000000	33.150000	ICIIII
0991623	REPLACE CHILLER	1	6	0	19.60	39.20	58.80	97.500000	58275.000000	97.500000	ICIIII
5	0991630 900 TONS										
0991631	REPAIR CHILLER	1	6	0	9.80	19.60	29.40	16.770000	188003.000000	16.770000	ICIIII
0991632	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	33.150000	.000000	33.150000	ICIIII
0991633	REPLACE CHILLER	1	6	0	19.60	39.20	58.80	162.500000	120000.000000	162.500000	ICIIII
4	0991700 CHILLERS OPEN CENTRIFUGAL										
5	0991710 300 TONS										
0991711	REPAIR CHILLER	1	6	0	9.80	19.60	29.40	28.210000	62801.000000	28.210000	ICIIII
0991712	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	86.450000	.000000	86.450000	ICIIII
0991713	REPLACE CHILLER	1	6	0	19.60	39.20	58.80	97.500000	58275.000000	97.500000	ICIIII
5	0991720 900 TONS										
0991721	REPAIR CHILLER	1	6	0	9.80	19.60	29.40	16.770000	188003.000000	16.770000	ICIIII
0991722	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	33.150000	.000000	33.150000	ICIIII
0991723	REPLACE CHILLER	1	6	0	19.60	39.20	58.80	162.500000	120000.000000	162.500000	ICIIII
4	0991800 CHILLERS DOUBLE BUN HERMETIC										
5	0991810 100 TONS										
0991811	REPAIR CHILLER	1	6	0	9.80	19.60	29.40	16.770000	21317.000000	16.770000	ICIIII
0991812	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	38.350000	.000000	38.350000	ICIIII
0991813	REPLACE CHILLER	1	6	0	19.60	39.20	58.80	68.900000	39000.000000	68.900000	ICIIII
5	0991820 300 TONS										
0991821	REPAIR CHILLER	1	6	0	9.80	19.60	29.40	33.410000	90251.000000	33.410000	ICIIII
0991822	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	38.350000	.000000	38.350000	ICIIII
0991823	REPLACE CHILLER	1	6	0	19.60	39.20	58.80	107.900000	64000.000000	107.900000	ICIIII
5	0991830 900 TONS										
0991831	REPAIR CHILLER	1	6	0	9.80	19.60	29.40	65.780000	188453.000000	65.780000	ICIIII
0991832	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	38.350000	.000000	38.350000	ICIIII
0991833	REPLACE CHILLER	1	6	0	19.60	39.20	58.80	178.100000	132000.000000	178.100000	ICIIII
4	0991900 CHILLERS ONE STAGE ABSORBER										
5	0991910 100 TONS										
0991911	REPAIR CHILLER	1	6	0	9.80	19.60	29.40	8.580000	7200.000000	8.580000	ICIIII
0991912	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	113.750000	.000000	113.750000	ICIIII

Army Wide Task/Basic Task Structure List

Tree id: BF Group id: B5

Page 40

UM=Unit of Measure		TRD=Trade Index	Class=Task Classification			TWMTH=Task		Work Performance Method		EQUIPMENT HOURS	TWMTH
CACES	DESCRIPTION	UM	TRD	CLASS	HIGH FREQ	AVE FREQ	LOW FREQ	LABOR HOURS	MATERIAL COSTS		
0991913	REPLACE CHILLER	1	6	0	19.60	39.20	58.80	65.000000	35000.000000	65.000000	IC1111
5	0991920	300 TONS									
0991921	REPAIR CHILLER	1	6	0	9.80	19.60	29.40	8.580000	7200.000000	8.580000	IC1111
0991922	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	16.770000	.000000	16.770000	IC1111
0991923	REPLACE CHILLER	1	6	0	19.60	39.20	58.80	104.000000	58000.000000	104.000000	IC1111
5	0991930	900 TONS									
0991931	REPAIR CHILLER	1	6	0	9.80	19.60	29.40	8.580000	7200.000000	8.580000	IC1111
0991932	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	16.770000	.000000	16.770000	IC1111
0991933	REPLACE CHILLER	1	6	0	19.60	39.20	58.80	167.700000	107000.000000	167.700000	IC1111
4	0991A00	CHILLERS TWO STAGE ABSORBER									
5	0991A10	300 TONS									
0991A11	REPAIR CHILLER	1	6	0	9.80	19.60	29.40	8.580000	7200.000000	8.580000	IC1111
0991A12	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	16.770000	.000000	16.770000	IC1111
0991A13	REPLACE CHILLER	1	6	0	19.60	39.20	58.80	114.400000	64000.000000	114.400000	IC1111
5	0991A20	900 TONS									
0991A21	REPAIR CHILLER	1	6	0	9.80	19.60	29.40	8.580000	7200.000000	8.580000	IC1111
0991A22	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	15.600000	.000000	15.600000	IC1111
0991A23	REPLACE CHILLER	1	6	0	19.60	39.20	58.80	184.600000	118700.000000	184.600000	IC1111
4	0991B00	HEAT REJECTION SYSTMS AIRCOOLED CONDENSER									
5	0991B10	5 TONS									
0991B11	REPAIR CONDENSER	1	6	0	9.80	19.60	29.40	6.500000	438.000000	6.500000	IC1111
0991B12	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	2.340000	.000000	2.340000	IC1111
0991B13	REPLACE CONDENSER	1	6	0	19.60	29.40	39.20	9.100000	775.000000	9.100000	IC1111
5	0991B20	20 TONS									
0991B21	REPAIR CONDENSER	1	6	0	9.80	19.60	29.40	6.500000	526.000000	6.500000	IC1111
0991B22	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	2.340000	.000000	2.340000	IC1111
0991B23	REPLACE CONDENSER	1	6	0	19.60	29.40	39.20	20.800000	2300.000000	20.800000	IC1111
5	0991B30	50 TONS									
0991B31	REPAIR CONDENSER	1	6	0	9.80	19.60	29.40	6.500000	614.000000	6.500000	IC1111
0991B32	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	4.160000	.000000	4.160000	IC1111
0991B33	REPLACE CONDENSER	1	6	0	19.60	29.40	39.20	31.200000	4995.000000	31.200000	IC1111
4	0991C00	HEAT REJECTION SYSTMS COOLING TOWER									
5	0991C10	50 TONS									
0991C11	REPAIR COOLING TOWER	1	6	0	9.80	19.60	29.40	5.200000	1141.000000	5.200000	IC1111
0991C12	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	4.550000	.000000	4.550000	IC1111
0991C13	REPLACE COOLING TOWER	1	6	0	19.60	29.40	39.20	46.800000	4225.000000	46.800000	IC1111
5	0991C20	100 TONS									
0991C21	REPAIR COOLING TOWER	1	6	0	9.80	19.60	29.40	5.200000	1141.000000	5.200000	IC1111
0991C22	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	14.170000	.000000	14.170000	IC1111
0991C23	REPLACE COOLING TOWER	1	6	0	19.60	29.40	39.20	52.000000	9500.000000	52.000000	IC1111
5	0991C30	300 TONS									
0991C31	REPAIR COOLING TOWER	1	6	0	9.80	19.60	29.40	5.200000	2371.000000	5.200000	IC1111
0991C32	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	16.510000	.000000	16.510000	IC1111
0991C33	REPLACE COOLING TOWER	1	6	0	19.60	29.40	39.20	78.000000	15450.000000	78.000000	IC1111
5	0991C40	900 TONS									
0991C41	REPAIR COOLING TOWER	1	6	0	9.80	19.60	29.40	5.200000	2371.000000	5.200000	IC1111
0991C42	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	17.940000	.000000	17.940000	IC1111
0991C43	REPLACE COOLING TOWER	1	6	0	19.60	29.40	39.20	128.700000	40700.000000	128.700000	IC1111
4	0991D00	HEAT REJECTION SYSTMS EVAPORATIVE COND									
5	0991D10	20 TONS									
0991D11	REPAIR EVAPORATIVE CONDENSER	1	6	0	9.80	19.60	29.40	11.960000	749.500000	11.960000	IC1111
0991D12	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	8.320000	.000000	8.320000	IC1111
0991D13	REPLACE EVAPORATIVE CONDENSER	1	6	0	19.60	29.40	39.20	36.400000	3480.000000	36.400000	IC1111

Army Wide Task/Basic Task Structure List

Tree id: BF

Group id: B5

Page 41

UM=Unit of Measure		TRD=Trade Index	Class=Task Classification	TWPMTH=Task Work Performance Method	EQUIPMENT		HOURS		TWPMTMTH	
CACES	DESCRIPTION	UM	TRD	CLASS	FREQ	AVE	LOW	LABOR	MATERIAL	Method
								HOURS	COSTS	
5	0991020 100 TONS	1	6	0	9.80	19.60	29.40	11.960000	1213.750000	IC1111
0991021	REPAIR EVAPORATIVE CONDENSER	1	6	0	1.00	1.00	1.00	13.650000	.000000	IC1111
0991022	PREVENTIVE MAINTENANCE	1	6	0	19.60	29.40	39.20	100.100000	9470.000000	IC1111
5	0991030 300 TONS	1	6	0	9.80	19.60	29.40	11.960000	2139.750000	IC1111
0991031	REPAIR EVAPORATIVE CONDENSER	1	6	0	1.00	1.00	1.00	3.120000	.000000	IC1111
0991032	PREVENTIVE MAINTENANCE	1	6	0	19.60	29.40	39.20	182.000000	30000.000000	IC1111
0991033	REPLACE EVAPORATIVE CONDENSER	1	6	0	1.88	4.70	9.40	.039000	.000000	IC1111
4	0991000 EXPANSION TANK	1	6	0	18.80	47.00	65.80	3.471000	128.000000	IC1111
0991001	REFILL EXPANSION TANK	1	6	0						
0991002	REPLACE EXPANSION TANK	1	6	0						
3	0992000 FIXTURES, COOLING GENERATION	4	6	0	4.70	9.40	14.10	.325000	.160000	IC1111
3	0993000 INTERCONNECTING PIPING SYSTEMS, COOL GEN	4	6	0	18.80	28.20	47.00	10.744500	39.000000	IC1111
3	0994000 DISTRIBUTION PIPING SYSTEMS, COOL GEN	4	6	0						
4	0994100 PIPE/FITTINGS	4	6	0	4.70	9.40	14.10	.184600	.080000	IC1111
5	0994110 PIPE/FITTINGS, ST.&CL.	4	6	0	9.40	18.80	47.00	5.551000	48.120000	IC1111
0994111	REPAIR CHILLED WATER PIPE	4	6	0						
0994112	REPLACE CHILLED WATER PIPE, 12' SECTION	4	6	0						
5	0994120 PIPE/FITTINGS, COPPER	4	6	0	4.70	9.40	14.10	.184600	.080000	IC1111
0994121	REPAIR SOLDER JOINT	4	6	0	9.40	18.80	47.00	5.551000	48.120000	IC1111
0994122	REPLACE CHILLED WATER PIPE, 12' SECTION	4	6	0						
4	0994200 GATE VALVE	1	6	0	4.70	9.40	14.10	.353600	.420000	IC1111
5	0994210 GATE VALVE, 3/8"-1 1/2"	1	6	0	9.40	18.80	47.00	.689000	.689000	IC1111
0994211	REPACK GATE VALVE GLAND	1	6	0						
0994212	REPLACE GATE VALVE, PARTIAL	1	6	0	4.70	9.40	14.10	.354900	.572000	IC1111
5	0994220 GATE VALVE, 2"-3"	1	6	0	9.40	18.80	47.00	.354900	.572000	IC1111
0994221	REPACK GATE VALVE GLAND	1	6	0						
0994222	REPLACE GATE VALVE, PARTIAL	1	6	0	1.88	2.82	4.70	.354900	.572000	IC1111
5	0994280 DRAIN VALVE	1	6	0	4.70	9.40	14.10	.354900	.572000	IC1111
0994281	REPACK DRAIN VALVE GLAND	1	6	0	4.70	9.40	14.10	.354900	.572000	IC1111
0994282	REPLACE VALVE STEM ASSEMBLY	1	6	0	1.88	2.82	4.70	.354900	.572000	IC1111
0994283	REPLACE VALVE	1	6	0	14.10	18.80	23.50	.689000	.689000	IC1111
4	0994300 COLLING GENERATION	4	6	0	2.82	4.70	9.40	.338000	1.860000	IC1111
5	0994340 PIPE INSULATION	4	6	0	28.20	47.00	65.80	91.000000	850.000000	IC1111
0994341	REPAIR BROKEN PIPE INSULATION	4	6	0						
0994342	REPLACE PIPE INSULATION	4	6	0						
4	0994400 CIRCULATION PUMP	1	6	0	1.88	4.70	9.40	.586300	1.400000	IC1111
5	0994410 CIRC. PUMP 1/12-1/2 H.P.	1	6	0	1.00	1.00	1.00	.109200	.260000	IC1111
0994411	REPAIR CIRCULATOR PUMP, 1/12 - 1/2 HP	1	6	0	9.40	14.10	18.80	4.199000	350.000000	IC1111
0994412	PREVENTIVE MAINTENANCE ON CIRCULATOR PUM	1	6	0						
0994413	REPLACE CIRCULATION PUMP	1	6	0	1.88	4.70	9.40	.603200	32.820000	IC1111
5	0994420 CIRCULATION PUMP 5 H.P.	1	6	0	1.00	1.00	1.00	.109200	.260000	IC1111
0994421	REPAIR CIRCULATOR PUMP 5 HP.	1	6	0	9.40	14.10	18.80	15.600000	1200.000000	IC1111
0994422	PREVENTIVE MAINT.CIRC.PUMP 5HP	1	6	0						
0994423	REPLACE CIRC. PUMP 5 HP.	1	6	0						
2	09A0000 HEATING AND COOLING GENERATION SYSTEMS	1	6	0						
3	09A1000 EQUIPMENT, H & C	1	6	0						
4	09A1100 MULTI-ZONE	1	6	0						
5	09A1110 6500 CFM	1	6	0	4.85	9.70	14.55	1.560000	20.460000	IC1111
09A1111	REPAIR MULTI-ZONE UNIT	1	6	0	1.00	1.00	1.00	5.200000	5.200000	IC1111
09A1112	PREVENTIVE MAINT. ANNUAL	1	6	0	.33	.33	.33	.650000	14.760000	IC1111
09A1113	PREVENTIVE MAINT. REPL. FLTRS.	1	6	0	9.70	14.55	19.40	36.400000	5658.000000	IC1111
09A1114	REPLACE MULTI-ZONE UNIT	1	6	0						

Army Wide Task/Basic Task Structure List

Tree id: BF Group id: B5

Page 42

Unit of Measure		TRD=Trade Index	Class=Task Classification	TUPMTH=Task Work Performance Method	MATERIAL COSTS		LABOR HOURS		EQUIPMENT HOURS		TUPMTH
CAGE	DESCRIPTION	UM	TRD	CLASS	FREQ	HIGH AVE FREQ	LOW FREQ				
5	09A1120 10000 CFM	1	6	0	4.85	9.70	14.55	1.560000	20.460000	1.560000	IC1111
09A1121	REPAIR MULTI-ZONE UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1122	PREVENTIVE MAINT. ANNUAL	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1123	REPLACE MULTI-ZONE UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1124	REPLACE MULTI-ZONE UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
5	09A1130 25000 CFM	1	6	0	4.85	9.70	14.55	1.560000	20.460000	1.560000	IC1111
09A1131	REPAIR MULTI-ZONE UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1132	PREVENTIVE MAINT. ANNUAL	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1133	REPLACE MULTI-ZONE UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1134	REPLACE MULTI-ZONE UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
5	09A1140 50000 CFM	1	6	0	4.85	9.70	14.55	1.560000	20.460000	1.560000	IC1111
09A1141	REPAIR MULTI-ZONE UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1142	PREVENTIVE MAINT. ANNUAL	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1143	REPLACE MULTI-ZONE UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1144	REPLACE MULTI-ZONE UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
4	09A1200 DUAL DUCT	1	6	0	4.85	9.70	14.55	1.560000	20.460000	1.560000	IC1111
5	09A1210 6500 CFM	1	6	0	4.85	9.70	14.55	1.560000	20.460000	1.560000	IC1111
09A1211	REPAIR DUAL DUCT UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1212	PREVENTIVE MAINT. ANNUAL	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1213	REPLACE DUAL DUCT UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1214	REPLACE DUAL DUCT UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
5	09A1220 10000 CFM	1	6	0	4.85	9.70	14.55	1.560000	20.460000	1.560000	IC1111
09A1221	REPAIR DUAL DUCT UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1222	PREVENTIVE MAINT. ANNUAL	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1223	REPLACE DUAL DUCT UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1224	REPLACE DUAL DUCT UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
5	09A1230 25000 CFM	1	6	0	4.85	9.70	14.55	1.560000	20.460000	1.560000	IC1111
09A1231	REPAIR DUAL DUCT UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1232	PREVENTIVE MAINT. ANNUAL	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1233	REPLACE DUAL DUCT UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1234	REPLACE DUAL DUCT UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
5	09A1240 50000 CFM	1	6	0	4.85	9.70	14.55	1.560000	20.460000	1.560000	IC1111
09A1241	REPAIR DUAL DUCT UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1242	PREVENTIVE MAINT. ANNUAL	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1243	REPLACE DUAL DUCT UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1244	REPLACE DUAL DUCT UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
4	09A1300 THREE DECK MULTI-ZONE	1	6	0	4.85	9.70	14.55	1.560000	20.460000	1.560000	IC1111
5	09A1310 6500 CFM	1	6	0	4.85	9.70	14.55	1.560000	20.460000	1.560000	IC1111
09A1311	REPAIR MULTI-ZONE UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1312	PREVENTIVE MAINT. ANNUAL	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1313	REPLACE MULTI-ZONE UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1314	REPLACE MULTI-ZONE UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
5	09A1320 10000 CFM	1	6	0	4.85	9.70	14.55	1.560000	20.460000	1.560000	IC1111
09A1321	REPAIR MULTI-ZONE UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1322	PREVENTIVE MAINT. ANNUAL	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1323	REPLACE MULTI-ZONE UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1324	REPLACE MULTI-ZONE UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
5	09A1330 25000 CFM	1	6	0	4.85	9.70	14.55	1.560000	20.460000	1.560000	IC1111
09A1331	REPAIR MULTI-ZONE UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1332	PREVENTIVE MAINT. ANNUAL	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1333	REPLACE MULTI-ZONE UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
09A1334	REPLACE MULTI-ZONE UNIT	1	6	0	1.00	1.00	1.00	5.200000	20.600000	5.200000	IC1111
5	09A1340 50000 CFM	1	6	0	4.85	9.70	14.55	1.560000	20.460000	1.560000	IC1111

Army Wide Task/Basic Task Structure List

Tree id: BF Group id: B5

Page 43

UM=Unit of Measure										TRD=Trade Index	Class=Task Classification			TPMTH=Task Work Performance	Method	EQUIPMENT	
CASES	DESCRIPTION		UM	TRD	CLASS	FREQ	HIGH FREQ	AVE FREQ	LOW FREQ	LABOR HOURS	MATERIAL COSTS	HOURS	TPMTH				
09A1341	REPAIR MULTI-ZONE UNIT		1	6	0	4.85	9.70	14.55	1.560000	100.000000	1.560000	IC1111					
09A1342	PREVENTIVE MAINT. ANNUAL		1	6	0	1.00	1.00	1.00	5.200000	42.360000	5.200000	IC1111					
09A1343	PREVENTIVE MAINT. REPL. FLTRS.		1	6	0	.33	.33	.33	.910000	33.600000	.910000	IC1111					
09A1344	REPLACE MULTI-ZONE UNIT		1	6	0	9.70	14.55	19.40	105.300000	25760.000000	105.300000	IC1111					
4	09A1400 DUAL DUCT VARIABLE VOLUME																
5	09A1410	6500 CFM															
09A1411	REPAIR DUAL DUCT VARIABLE VOLUME SYSTEMS		1	6	0	4.85	9.70	14.55	1.560000	20.460000	1.560000	IC1111					
09A1412	PREVENTIVE MAINT. ANNUAL		1	6	0	1.00	1.00	1.00	5.070000	20.680000	5.070000	IC1111					
09A1413	PREVENTIVE MAINT. REPL. FLTRS.		1	6	0	.33	.33	.33	.650000	14.760000	.650000	IC1111					
09A1414	REPLACE DUAL DUCT VARIABLE VOLUME UNIT		1	6	0	9.70	14.55	19.40	39.000000	6200.000000	39.000000	IC1111					
5	09A1420	10000 CFM															
09A1421	REPAIR DUAL DUCT VARIABLE VOLUME UNIT		1	6	0	4.85	9.70	14.55	1.560000	20.460000	1.560000	IC1111					
09A1422	PREVENTIVE MAINT. ANNUAL		1	6	0	1.00	1.00	1.00	5.070000	20.680000	5.070000	IC1111					
09A1423	PREVENTIVE MAINT. REPL. FLTRS.		1	6	0	.33	.33	.33	.650000	19.680000	.650000	IC1111					
09A1424	REPLACE DUAL DUCT VARIABLE VOLUME UNIT		1	6	0	9.70	14.55	19.40	46.800000	8400.000000	46.800000	IC1111					
5	09A1430	25000 CFM															
09A1431	REPAIR DUAL DUCT VARIABLE VOLUME UNIT		1	6	0	4.85	9.70	14.55	1.560000	42.360000	1.560000	IC1111					
09A1432	PREVENTIVE MAINT. ANNUAL		1	6	0	1.00	1.00	1.00	5.070000	63.540000	5.070000	IC1111					
09A1433	PREVENTIVE MAINT. REPL. FLTRS.		1	6	0	.33	.33	.33	.780000	26.240000	.780000	IC1111					
09A1434	REPLACE DUAL DUCT VARIABLE VOLUME UNIT		1	6	0	9.70	14.55	19.40	83.200000	16000.000000	83.200000	IC1111					
5	09A1440	50000 CFM															
09A1441	REPAIR DUAL DUCT VARIABLE VOLUME UNIT		1	6	0	4.85	9.70	14.55	1.560000	42.360000	1.560000	IC1111					
09A1442	PREVENTIVE MAINT. ANNUAL		1	6	0	1.00	1.00	1.00	5.070000	63.540000	5.070000	IC1111					
09A1443	PREVENTIVE MAINT. REPL. FLTRS.		1	6	0	.33	.33	.33	.910000	32.800000	.910000	IC1111					
09A1444	REPLACE DUAL DUCT VARIABLE VOLUME UNIT		1	6	0	9.70	14.55	19.40	115.700000	28000.000000	115.700000	IC1111					
4	09A1500 VARIABLE VOLUME																
5	09A1510	6500 CFM															
09A1511	REPAIR VARIABLE VOLUME UNIT		1	6	0	4.85	9.70	14.55	1.560000	20.460000	1.560000	IC1111					
09A1512	PREVENTIVE MAINT. ANNUAL		1	6	0	1.00	1.00	1.00	5.070000	20.680000	5.070000	IC1111					
09A1513	PREVENTIVE MAINT. REPL. FLTRS.		1	6	0	.33	.33	.33	.650000	14.760000	.650000	IC1111					
09A1514	REPLACE VARIABLE VOLUME UNIT		1	6	0	9.70	14.55	19.40	32.500000	5658.000000	32.500000	IC1111					
5	09A1520	10000 CFM															
09A1521	REPAIR VARIABLE VOLUME UNIT		1	6	0	4.85	9.70	14.55	1.560000	20.460000	1.560000	IC1111					
09A1522	PREVENTIVE MAINT. ANNUAL		1	6	0	1.00	1.00	1.00	5.070000	20.680000	5.070000	IC1111					
09A1523	PREVENTIVE MAINT. REPL. FLTRS.		1	6	0	.33	.33	.33	.650000	19.680000	.650000	IC1111					
09A1524	REPLACE VARIABLE VOLUME UNIT		1	6	0	9.70	14.55	19.40	42.900000	7595.000000	42.900000	IC1111					
5	09A1530	25000 CFM															
09A1531	REPAIR VARIABLE VOLUME UNIT		1	6	0	4.85	9.70	14.55	1.560000	50.000000	1.560000	IC1111					
09A1532	PREVENTIVE MAINT. ANNUAL		1	6	0	1.00	1.00	1.00	5.070000	63.540000	5.070000	IC1111					
09A1533	PREVENTIVE MAINT. REPL. FLTRS.		1	6	0	1.00	1.00	1.00	.780000	26.240000	.780000	IC1111					
09A1534	REPLACE VARIABLE VOLUME UNIT		1	6	0	9.70	14.55	19.40	75.400000	14490.000000	75.400000	IC1111					
5	09A1540	50000 CFM															
09A1541	REPAIR VARIABLE VOLUME UNIT		1	6	0	4.85	9.70	14.55	1.560000	100.000000	1.560000	IC1111					
09A1542	PREVENTIVE MAINT. ANNUAL		1	6	0	1.00	1.00	1.00	5.070000	63.540000	5.070000	IC1111					
09A1543	PREVENTIVE MAINT. REPL. FLTRS.		1	6	0	.33	.33	.33	.910000	32.800000	.910000	IC1111					
09A1544	REPLACE VARIABLE VOLUME UNIT		1	6	0	9.70	14.55	19.40	105.300000	25760.000000	105.300000	IC1111					
4	09A1600 TERM REHEAT																
5	09A1610	6500 CFM															
09A1611	REPAIR TERMINAL REHEAT UNIT		1	6	0	5.40	10.80	16.20	1.560000	20.460000	1.560000	IC1111					
09A1612	PREVENTIVE MAINT. ANNUAL		1	6	0	1.00	1.00	1.00	5.070000	20.680000	5.070000	IC1111					
09A1613	PREVENTIVE MAINT. REPL. FLTRS.		1	6	0	.33	.33	.33	.650000	14.760000	.650000	IC1111					
09A1614	REPLACE TERMINAL REHEAT UNIT		1	6	0	10.80	16.20	21.60	32.500000	4037.000000	32.500000	IC1111					
5	09A1620	10000 CFM															

Army Wide Task/Basic Task Structure List

Tree id: BF Group id: 85

Page 44

UM=Unit of Measure TRD=Trade Index Class=Task Classification TWPMT=Task Work Performance: Method										EQUIPMENT	
CACES	DESCRIPTION	UM	TRD	CLASS	HIGH AVE FREQ	LOW FREQ	LABOR HOURS	MATERIAL COSTS		HOURS	TWPMTH
09A1621	REPAIR TERMINAL REHEAT UNIT	1	6	0	5.40	10.80	1.560000	20.460000		1.560000	IC1111
09A1622	PREVENTIVE MAINT. ANNUAL	1	6	0	1.00	1.00	5.070000	20.680000		5.070000	IC1111
09A1623	PREVENTIVE MAINT. REPL. FLTRS.	1	6	0	.33	.33	.650000	19.680000		.650000	IC1111
09A1624	REPLACE TERMINAL REHEAT UNIT	1	6	0	10.80	16.20	37.700000	5832.000000		37.700000	IC1111
5	09A1630 25000 CFM										
09A1631	REPAIR TERMINAL REHEAT UNIT	1	6	0	5.40	10.80	1.560000	50.000000		1.560000	IC1111
09A1632	PREVENTIVE MAINT. ANNUAL	1	6	0	1.00	1.00	5.070000	63.540000		5.070000	IC1111
09A1633	PREVENTIVE MAINT. REPL. FLTRS.	1	6	0	.33	.33	.780000	26.240000		.780000	IC1111
09A1634	REPLACE TERMINAL REHEAT UNIT	1	6	0	10.80	16.20	71.500000	14410.000000		71.500000	IC1111
5	09A1640 50000 CFM										
09A1641	REPAIR TERMINAL REHEAT UNIT	1	6	0	5.40	10.80	1.560000	100.000000		1.560000	IC1111
09A1642	PREVENTIVE MAINT. ANNUAL	1	6	0	1.00	1.00	5.070000	63.540000		5.070000	IC1111
09A1643	PREVENTIVE MAINT. REPL. FLTRS.	1	6	0	.33	.33	.910000	32.800000		.910000	IC1111
09A1644	REPLACE TERMINAL REHEAT UNIT	1	6	0	10.80	16.20	113.100000	21560.000000		113.100000	IC1111
4	09A1700 TWO-PIPE INDUCTION										
5	09A1710 6500 CFM										
09A1711	REPAIR 2 PIPE INDUCTION UNIT	1	6	0	5.40	10.80	1.560000	20.460000		1.560000	IC1111
09A1712	PREVENTIVE MAINT. ANNUAL	1	6	0	1.00	1.00	5.070000	20.680000		5.070000	IC1111
09A1713	PREVENTIVE MAINT. REPL. FLTRS.	1	6	0	.33	.33	.650000	14.760000		.650000	IC1111
09A1714	REPLACE 2 PIPE INDUCTION UNIT	1	6	0	10.80	16.20	32.500000	4037.000000		32.500000	IC1111
5	09A1720 10000 CFM										
09A1721	REPAIR 2 PIPE INDUCTION UNIT	1	6	0	5.40	10.80	1.560000	20.460000		1.560000	IC1111
09A1722	PREVENTIVE MAINT. ANNUAL	1	6	0	1.00	1.00	5.070000	20.680000		5.070000	IC1111
09A1723	PREVENTIVE MAINT. REPL. FLTRS.	1	6	0	.33	.33	.650000	19.680000		.650000	IC1111
09A1724	REPLACE 2 PIPE INDUCTION UNIT	1	6	0	10.80	16.20	37.700000	5832.000000		37.700000	IC1111
5	09A1730 25000 CFM										
09A1731	REPAIR 2 PIPE INDUCTION UNITS	1	6	0	5.40	10.80	1.560000	50.000000		1.560000	IC1111
09A1732	PREVENTIVE MAINT. ANNUAL	1	6	0	1.00	1.00	5.070000	63.540000		5.070000	IC1111
09A1733	PREVENTIVE MAINT. REPL. FLTRS.	1	6	0	.33	.33	.780000	26.240000		.780000	IC1111
09A1734	REPLACE 2 PIPE INDUCTION UNIT	1	6	0	10.80	16.20	71.500000	14410.000000		71.500000	IC1111
5	09A1740 50000 CFM										
09A1741	REPAIR 2 PIPE INDUCTION UNIT	1	6	0	5.40	10.80	1.560000	100.000000		1.560000	IC1111
09A1742	PREVENTIVE MAINT. ANNUAL	1	6	0	1.00	1.00	5.070000	63.540000		5.070000	IC1111
09A1743	PREVENTIVE MAINT. REPL. FLTRS.	1	6	0	.33	.33	.910000	32.800000		.910000	IC1111
09A1744	REPLACE 2 PIPE INDUCTION UNIT	1	6	0	10.80	16.20	113.100000	21560.000000		113.100000	IC1111
4	09A1800 FOUR-PIPE INDUCTION										
5	09A1810 6500 CFM										
09A1811	REPAIR 4 PIPE INDUCTION UNIT	1	6	0	4.70	9.40	1.560000	20.460000		1.560000	IC1111
09A1812	PREVENTIVE MAINT. ANNUAL	1	6	0	1.00	1.00	5.070000	20.640000		5.070000	IC1111
09A1813	PREVENTIVE MAINT. REPL. FLTRS.	1	6	0	.33	.33	.650000	14.760000		.650000	IC1111
09A1814	REPLACE 4 PIPE INDUCTION UNIT	1	6	0	19.60	39.20	32.500000	4037.000000		32.500000	IC1111
5	09A1820 10000 CFM										
09A1821	REPAIR 4 PIPE INDUCTION UNIT	1	6	0	9.80	19.60	1.560000	20.460000		1.560000	IC1111
09A1822	PREVENTIVE MAINT. ANNUAL	1	6	0	1.00	1.00	5.070000	20.680000		5.070000	IC1111
09A1823	PREVENTIVE MAINT. REPL. FLTRS.	1	6	0	.33	.33	.650000	19.680000		.650000	IC1111
09A1824	REPLACE 4 PIPE INDUCTION UNIT	1	6	0	19.60	39.20	37.700000	5832.000000		37.700000	IC1111
5	09A1830 25000 CFM										
09A1831	REPAIR 4 PIPE INDUCTION UNIT	1	6	0	9.80	19.60	1.560000	50.000000		1.560000	IC1111
09A1832	PREVENTIVE MAINT. ANNUAL	1	6	0	1.00	1.00	5.070000	63.540000		5.070000	IC1111
09A1833	PREVENTIVE MAINT. REPL. FLTRS.	1	6	0	.33	.33	.780000	26.240000		.780000	IC1111
09A1834	REPLACE 4 PIPE INDUCTION UNIT	1	6	0	19.60	39.20	71.500000	14410.000000		71.500000	IC1111
5	09A1840 50000 CFM										
09A1841	REPAIR 4 PIPE INDUCTION UNIT	1	6	0	9.80	19.60	1.560000	100.000000		1.560000	IC1111

Army Wide Task/Basic Task Structure List

Tree id: BF Group id: B5

Page 45

UM=Unit of Measure		TRD=Trade Index	Class=Task Classification		TUPMTH=Task Work Performance Method		Material Costs		Labor Hours		Equipment Hours		TUPMTH	
CACES	DESCRIPTION	UM	TRD	CLASS	FREQ	HIGH	AVE	LOW	FREQ	HOURS	HOURS	HOURS	HOURS	HOURS
09A1842	PREVENTIVE MAINT. ANNUAL	1	6	0	1.00	1.00	1.00	1.00	1.00	5.070000	5.070000	IC1111	5.070000	IC1111
09A1843	PREVENTIVE MAINT. REPL. FLTRS.	1	6	0	.33	.33	.33	.33	.33	.910000	.910000	IC1111	.910000	IC1111
09A1844	REPLACE 4 PIPE INDUCTION UNIT	1	6	0	19.60	19.60	19.60	19.60	19.60	113.100000	113.100000	IC1111	113.100000	IC1111
4	09A1900 TWO-PIPE FAN COIL													
5	09A1910 200 CFM													
09A1911	REPAIR FAN COIL UNIT	1	6	0	9.80	9.80	9.80	9.80	9.80	1.560000	1.560000	IC1111	1.560000	IC1111
09A1912	PREVENTIVE MAINT. CLEAN COIL	1	6	0	1.00	1.00	1.00	1.00	1.00	.650000	.650000	IC1111	.650000	IC1111
09A1913	PREVENTIVE MAINT. REPL. FLTRS.	1	6	0	.33	.33	.33	.33	.33	.130000	.130000	IC1111	.130000	IC1111
09A1914	REPLACE FAN COIL UNIT	1	6	0	19.60	19.60	19.60	19.60	19.60	2.600000	2.600000	IC1111	2.600000	IC1111
5	09A1920 400 CFM													
09A1921	REPAIR FAN COIL UNIT	1	6	0	9.80	9.80	9.80	9.80	9.80	1.560000	1.560000	IC1111	1.560000	IC1111
09A1922	PREVENTIVE MAINT. CLEAN COIL	1	6	0	1.00	1.00	1.00	1.00	1.00	.650000	.650000	IC1111	.650000	IC1111
09A1923	PREVENTIVE MAINT. REPL. FLTRS.	1	6	0	.33	.33	.33	.33	.33	.130000	.130000	IC1111	.130000	IC1111
09A1924	REPLACE FAN COIL UNIT	1	6	0	19.60	19.60	19.60	19.60	19.60	2.600000	2.600000	IC1111	2.600000	IC1111
5	09A1930 600 CFM													
09A1931	REPAIR FAN COIL UNIT	1	6	0	9.80	9.80	9.80	9.80	9.80	1.560000	1.560000	IC1111	1.560000	IC1111
09A1932	PREVENTIVE MAINT. CLEAN COIL	1	6	0	1.00	1.00	1.00	1.00	1.00	.650000	.650000	IC1111	.650000	IC1111
09A1933	PREVENTIVE MAINT. REPL. FLTRS.	1	6	0	.33	.33	.33	.33	.33	.130000	.130000	IC1111	.130000	IC1111
09A1934	REPLACE FAN COIL UNIT	1	6	0	19.60	19.60	19.60	19.60	19.60	2.860000	2.860000	IC1111	2.860000	IC1111
5	09A1940 1200 CFM													
09A1941	REPAIR FAN COIL UNIT	1	6	0	9.80	9.80	9.80	9.80	9.80	1.560000	1.560000	IC1111	1.560000	IC1111
09A1942	PREVENTIVE MAINT. CLEAN COIL	1	6	0	1.00	1.00	1.00	1.00	1.00	.650000	.650000	IC1111	.650000	IC1111
09A1943	PREVENTIVE MAINT. REPL. FLTRS.	1	6	0	.33	.33	.33	.33	.33	.130000	.130000	IC1111	.130000	IC1111
09A1944	REPLACE FAN UNIT	1	6	0	19.60	19.60	19.60	19.60	19.60	3.250000	3.250000	IC1111	3.250000	IC1111
4	09A1A00 FOUR-PIPE FAN COIL													
5	09A1A10 200 CFM													
09A1A11	REPAIR FAN COIL UNIT	1	6	0	9.80	9.80	9.80	9.80	9.80	1.560000	1.560000	IC1111	1.560000	IC1111
09A1A12	PREVENTIVE MAINT. CLEAN COIL	1	6	0	1.00	1.00	1.00	1.00	1.00	.650000	.650000	IC1111	.650000	IC1111
09A1A13	PREVENTIVE MAINT. REPL. FLTRS.	1	6	0	.33	.33	.33	.33	.33	.130000	.130000	IC1111	.130000	IC1111
09A1A14	REPLACE FAN COIL UNIT	1	6	0	19.60	19.60	19.60	19.60	19.60	2.860000	2.860000	IC1111	2.860000	IC1111
5	09A1A20 400 CFM													
09A1A21	REPAIR FAN COIL UNIT	1	6	0	9.80	9.80	9.80	9.80	9.80	1.560000	1.560000	IC1111	1.560000	IC1111
09A1A22	PREVENTIVE MAINT. CLEAN COIL	1	6	0	1.00	1.00	1.00	1.00	1.00	.650000	.650000	IC1111	.650000	IC1111
09A1A23	PREVENTIVE MAINT. REPL. FLTRS.	1	6	0	.33	.33	.33	.33	.33	.130000	.130000	IC1111	.130000	IC1111
09A1A24	REPLACE FAN COIL UNIT	1	6	0	19.60	19.60	19.60	19.60	19.60	2.860000	2.860000	IC1111	2.860000	IC1111
5	09A1A30 600 CFM													
09A1A31	REPAIR FAN COIL UNIT	1	6	0	9.80	9.80	9.80	9.80	9.80	1.560000	1.560000	IC1111	1.560000	IC1111
09A1A32	PREVENTIVE MAINT. CLEAN COIL	1	6	0	1.00	1.00	1.00	1.00	1.00	.650000	.650000	IC1111	.650000	IC1111
09A1A33	PREVENTIVE MAINT. REPL. FLTRS.	1	6	0	.33	.33	.33	.33	.33	.130000	.130000	IC1111	.130000	IC1111
09A1A34	REPLACE FAN COIL UNIT	1	6	0	19.60	19.60	19.60	19.60	19.60	3.120000	3.120000	IC1111	3.120000	IC1111
5	09A1A40 1200 CFM													
09A1A41	REPAIR FAN COIL UNIT	1	6	0	9.80	9.80	9.80	9.80	9.80	1.560000	1.560000	IC1111	1.560000	IC1111
09A1A42	PREVENTIVE MAINT. CLEAN COIL	1	6	0	1.00	1.00	1.00	1.00	1.00	.650000	.650000	IC1111	.650000	IC1111
09A1A43	PREVENTIVE MAINT. REPL. FLTRS.	1	6	0	.33	.33	.33	.33	.33	.130000	.130000	IC1111	.130000	IC1111
09A1A44	REPLACE FAN COIL UNIT	1	6	0	19.60	19.60	19.60	19.60	19.60	3.120000	3.120000	IC1111	3.120000	IC1111
4	09A1B00 UNIT-VE.													
5	09A1B10 400 CFM													
09A1B11	REPAIR UNIT VENT	1	6	0	9.80	9.80	9.80	9.80	9.80	1.040000	1.040000	IC1111	1.040000	IC1111
09A1B12	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	1.00	1.00	1.820000	1.820000	IC1111	1.820000	IC1111
09A1B13	REPLACE UNIT VENT	1	6	0	19.60	19.60	19.60	19.60	19.60	2.600000	2.600000	IC1111	2.600000	IC1111
5	09A1B20 200 CFM													
09A1B21	REPAIR UNIT VENT	1	6	0	9.80	9.80	9.80	9.80	9.80	1.040000	1.040000	IC1111	1.040000	IC1111
09A1B22	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	1.00	1.00	1.820000	1.820000	IC1111	1.820000	IC1111

LINES	UN=Unit of Measure	TRD=Trade Index	CLASS=Task Classification	TUPMTH=Task Work Performance Method	MATERIAL COSTS			LABOR HOURS			EQUIPMENT HOURS			TUPMTH
					UM	TRD	CLASS	HIGH FREQ	AVE FREQ	LOW FREQ	HOURS	HOURS	HOURS	
09A1B23	REPLACE UNIT VENT				1	6	0	19.60	29.40	39.20	3.250000	1800.000000		3.250000 IC1111
4	09A1C00 SINGLE-ZONE DRAW THRU													
5	09A1C10 6500 CFM													
09A1C11	REPAIR SINGLE ZONE DRAW-THRU				1	6	0	9.80	19.60	29.40	1.560000	20.460000		1.560000 IC1111
09A1C12	PREVENTIVE MAINT. ANNUAL				1	6	0	1.00	1.00	1.00	5.070000	20.680000		5.070000 IC1111
09A1C13	PREVENTIVE MAINT. REPL. FLTRS.				1	6	0	.33	.33	.33	.650000	14.760000		.650000 IC1111
09A1C14	REPLACE SINGLE ZONE DRAW-THRU				1	6	0	19.60	29.40	39.20	32.500000	4037.000000		32.500000 IC1111
5	09A1C20 10030 CFM													
09A1C21	REPAIR SINGLE ZONE DRAW-THRU				1	6	0	9.80	19.60	29.40	1.560000	20.460000		1.560000 IC1111
09A1C22	PREVENTIVE MAINT. ANNUAL				1	6	0	1.00	1.00	1.00	5.070000	20.680000		5.070000 IC1111
09A1C23	PREVENTIVE MAINT. REPL. FLTRS.				1	6	0	.33	.33	.33	.650000	19.680000		.650000 IC1111
09A1C24	REPLACE SINGLE ZONE DRAW-THRU				1	6	0	19.60	29.40	39.20	37.700000	5832.000000		37.700000 IC1111
5	09A1C30 25000 CFM													
09A1C31	REPAIR SINGLE ZONE DRAW-THRU				1	6	0	9.80	19.60	29.40	1.560000	50.000000		1.560000 IC1111
09A1C32	PREVENTIVE MAINT. ANNUAL				1	6	0	1.00	1.00	1.00	5.070000	63.000000		5.070000 IC1111
09A1C33	PREVENTIVE MAINT. REPL. FLTRS.				1	6	0	.33	.33	.33	.780000	26.000000		.780000 IC1111
09A1C34	REPLACE SINGLE ZONE DRAW-THRU				1	6	0	19.60	29.40	39.20	71.500000	14410.000000		71.500000 IC1111
5	09A1C40 50000 CFM													
09A1C41	REPAIR SINGLE ZONE DRAW-THRU				1	6	0	9.80	19.60	29.40	1.560000	100.000000		1.560000 IC1111
09A1C42	PREVENTIVE MAINT. ANNUAL				1	6	0	1.00	1.00	1.00	5.070000	63.540000		5.070000 IC1111
09A1C43	PREVENTIVE MAINT. REPL. FLTRS.				1	6	0	.33	.33	.33	.910000	32.800000		.910000 IC1111
09A1C44	REPLACE SINGLE ZONE DRAW-THRU				1	6	0	19.60	29.40	39.20	113.100000	21560.000000		113.100000 IC1111
4	09A1D00 UNIT HEATER													
5	09A1D10 400 CFM													
09A1D11	REPAIR UNIT HEATER				1	6	0	9.80	19.60	29.40	1.040000	50.000000		1.040000 IC1111
09A1D12	PREVENTIVE MAINT. ANNUAL				1	6	0	1.00	1.00	1.00	1.820000	1.500000		1.820000 IC1111
09A1D13	REPLACE UNIT HEATER				1	6	0	19.60	29.40	39.20	2.600000	295.000000		2.600000 IC1111
5	09A1D20 1200 CFM													
09A1D21	REPAIR UNIT HEATER				1	6	0	9.80	19.60	29.40	1.040000	50.000000		1.040000 IC1111
09A1D22	PREVENTIVE MAINT. ANNUAL				1	6	0	1.00	1.00	1.00	1.820000	1.500000		1.820000 IC1111
09A1D23	REPLACE UNIT HEATER				1	6	0	19.60	29.40	39.20	3.250000	435.000000		3.250000 IC1111
4	09A1E00 HEAT PUMP													
5	09A1E10 HEAT PUMP 5 TONS													
09A1E11	REPAIR HEAT PUMP				1	6	0	9.80	19.60	29.40	23.400000	4530.470000		23.400000 IC1111
09A1E12	PREVENTIVE MAINT. ANNUAL				1	6	0	1.00	1.00	1.00	3.640000	.000000		3.640000 IC1111
09A1E13	REPLACE HEAT PUMP				1	6	0	19.60	39.20	58.80	8.385000	2825.000000		8.385000 IC1111
5	09A1E20 HEAT PUMP 10 TONS													
09A1E21	REPAIR HEAT PUMP				1	6	0	9.80	19.60	29.40	23.400000	8573.670000		23.400000 IC1111
09A1E22	PREVENTIVE MAINT. ANNUAL				1	6	0	1.00	1.00	1.00	9.230000	.000000		9.230000 IC1111
09A1E23	REPLACE HEAT PUMP				1	6	0	19.60	39.20	58.80	14.300000	5650.000000		14.300000 IC1111
5	09A1E30 HEAT PUMP 25 TONS													
09A1E31	REPAIR HEAT PUMP				1	6	0	9.80	19.60	29.40	23.400000	22406.670000		23.400000 IC1111
09A1E32	PREVENTIVE MAINT. ANNUAL				1	6	0	1.00	1.00	1.00	11.830000	.000000		11.830000 IC1111
09A1E33	REPLACE HEAT PUMP				1	6	0	19.60	39.20	58.80	19.500000	16750.000000		19.500000 IC1111
3	09A2000 FIXTURES, H & C													
3	09A3000 DISTRIBUTION SYSTEMS, H & C													
2	09B0000 VENTILATION SYSTEMS													
3	09B1000 EQUIPMENT, VENTILATION SYS.													
3	09B2000 FIXTURES, VENTILATION SYS.													
3	09B3000 DISTRIBUTION SYSTEMS, VENT. SYS.													
2	09C0000 EXHAUST SYSTEMS													
3	09C1000 EQUIPMENT, EXHAUST SYS.													
4	09C1100 EXHAUST FAN													

Army Wide Task/Basic Task Structure List

Tree id: BF Group id: B5

Page 47

UM=Unit of Measure		TRD=Trade Index	Class=Task Classification		TWPMT=Task Work Performance		Method	
CAGE	DESCRIPTION	UM	TRD	CLASS	HIGH FREQ	LOW FREQ	LABOR HOURS	MATERIAL COSTS
							EQUIPMENT HOURS	TWPMTH
5 1	09C1110 EXHAUST FAN 200 CFM	1	6	0	9.40	14.10	18.80	
09C1111	REPLACE FAN AND MOTOR	1	6	0	9.40	14.10	18.80	390000
09C1112	PREVENTIVE MAINT. CLEANING	1	6	0	9.40	14.10	18.80	325000
09C1113	REPLACE UNIT	1	6	0	9.40	18.80	23.50	3250000
5 2	09C1120 EXHAUST FAN 1000 CFM	1	6	0	5.00	10.00	15.00	
09C1121	REPAIR FAN	1	6	0	1.00	1.00	1.00	1.040000
09C1122	PREVENTIVE MAINTENANCE	1	6	0	1.00	1.00	1.00	1.300000
09C1123	REPLACE ROOF MOUNTED EXHAUST F	1	6	0	15.00	20.00	25.00	5.200000
5 3	09C1130 EXHAUST FAN 10000 CFM	1	6	0	4.70	9.40	14.10	
09C1131	REPAIR EXHAUST FAN 10000 CFM	1	6	0	1.00	1.00	1.00	1.560000
09C1132	PREVENTIVE MAINT. EXHAUST FAN	1	6	0	1.00	1.00	1.00	20.460000
09C1133	REPLACE EXHAUST FAN 10000 CFM	1	6	0	9.40	18.80	28.20	20.680000
5 4	09C1140 EXHAUST FAN 25000 CFM	1	6	0	4.70	9.40	14.10	
09C1141	REPAIR EXHAUST FAN 25000 CFM	1	6	0	1.00	1.00	1.00	1.560000
09C1142	PREVENTIVE MAINT. EXHAUST FAN	1	6	0	1.00	1.00	1.00	2.210000
09C1143	REPLACE EXHAUST FAN 25000 CFM	1	6	0	9.40	18.80	28.20	6.500000
5 5	09C1150 EXHAUST FAN 50000 CFM	1	6	0	4.70	9.40	14.10	
09C1151	REPAIR EXHAUST FAN 50000 CFM	1	6	0	1.00	1.00	1.00	1.560000
09C1152	PREVENTIVE MAINT. EXHAUST FAN	1	6	0	1.00	1.00	1.00	4.420000
09C1153	REPLACE EXHAUST FAN 50000 CFM	1	6	0	9.40	18.80	28.20	6.500000
3 2	09C2000 FIXTURES, EXHAUST SYS.							
3 3	09C3000 DISTRIBUTION SYSTEMS, EXHAUST SYS.							
2 13	09D0000 SPECIAL SYSTEMS							
3 1	09D1000 CLEAN ROOMS							
3 2	09D2000 RF SHIELDING							
3 3	09D3000 PAINT SPRAY BOOTHS							
3 4	09D4000 SPECIAL AIR FILTRATION							
3 5	09D5000 HUMIDITY CONTROL SYSTEMS							
4 1	09D5100 ROOM HUMIDIFIER, FLOOR TYPE							
09D5101	REPAIR HUMIDIFIER	1	6	0	1.88	4.70	7.52	390000
09D5102	PREVENTIVE MAINTENANCE CLEANING	1	6	0	1.00	1.00	1.00	.650000
09D5103	REPLACE HUMIDIFIER	1	6	0	4.70	9.40	14.10	.130000
3 6	09D6000 OTHER							
2 14	09E0000 CONTROLS AND INSTRUMENTATION							
3 1	09E1000 DEVICES							
1 1	09E1100 THERMOSTATS/PNEUMATICS							
5 1	09E1110 THERMOSTATS/PNEUMATICS							
09E1111	PREVENTIVE MAINTENANCE HEAT/COOL THERMOS	1	6	0	1.00	1.00	1.00	.000000
09E1112	REPLACE PNEUMATIC THERMOSTAT	1	6	0	15.00	20.00	25.00	1.300000
3 2	09E2000 TRANSMISSION MEDIA							
2 15	09F0000 TESTING, BALANCE, ETC.							
3 1	09F1000 TEST AND BALANCE							
3 2	09F2000 IDENTIFICATION SYSTEMS							
3 3	09F3000 O & M DATA							
1 7	1100000 INTERIOR ELECTRICAL							
2 1	1110000 SERVICE & DISTRIBUTION							
3 1	1112000 OVERHEAD SERVICE FEEDER							
1112001	REPAIR CABLE SPLICE	4	2	0	6.00	12.00	36.00	1.000000
1112002	CABLE INSPECTION	4	2	0	5.00	5.00	5.00	.650000
1112003	REPLACE SERVICE CABLE	4	2	0	15.00	30.00	90.00	21.915790
3 2	1113000 MAIN PROTECTION EQUIPMENT							
4 1	1113100 SWITCHGEAR, MAIN FRAME, 1200 A.							

DISTRIBUTION

Chief of Engineers

ATTN: CEHSC-IM-LH (2)

ATTN: CEHSC-IM-LP (2)

ATTN: CEMP-ECE-G

ATTN: CERD-L

USAEHSC

ATTN: CEHSC-FM-R

Fort Belvoir, VA

ATTN: CECC-R

US Army Engineer Districts (41)

ATTN: Chief, Design Branch

ATTN: Chief, Cost Estimating

US Army Engineer Divisions (14)

ATTN: Chief, Design Branch

ATTN: Chief, Cost Estimating

Defense Technical Info. Center 22304

ATTN: DTIC-FAB (2)

120

04/91